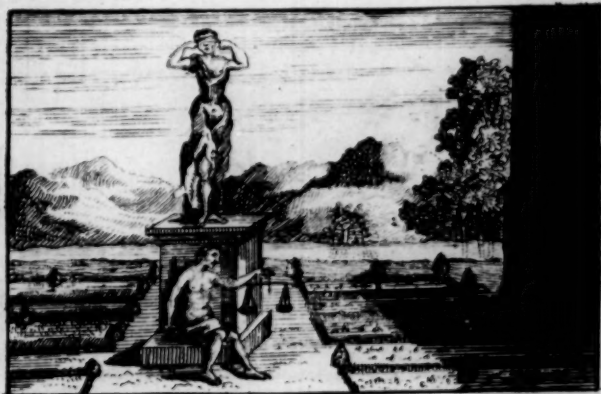


ALCIPHRON:
OR, THE
MINUTE PHILOSOPHER.
IN
SEVEN DIALOGUES.

*Containing an APOLOGY for the Christian Religion,
against those who are called Free-thinkers.*

VOLUME *the* SECOND.



The Balances of Deceit are in his Hand. Hosea xii. 7.

Τὸ Ἐξαπατᾶς αὐτὸν ὑφ' αὐτοῦ, πάντων χαλεπώτατον. Plato.

DUBLIN:

Printed for G. Risk, G. Ewing, and W. Smith, Booksellers in
Dame-Street, MDCCXXXII.

ALCIPHRON

OF THE

MINUTE PHILOSOPHER

SEVEN DILOGUES

Containing a History of the Christian Religion

VOLUME SECOND





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THE



THE
MINUTE PHILOSOPHER.

THE SIXTH DIALOGUE.

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I.



HE following day being Sunday, our Philosophers lay long in bed, while the rest of us went to Church in the Neighbouring Town, where we dined at *Euphranor's*, and after evening Service returned to the two Philosophers, whom we found in the Library. They told us, That, if there was a God, he was present every where, as well as at Church; and that if we had been serving him one way, they did not neglect to do as much another; inasmuch as a free exercise of Reason must be allowed the most acceptable service and Worship, that a rational creature can offer to its Creator. However, said *Alciphron*, if you, Gentlemen, can but solve the difficulties which I shall propose to-morrow morning, I promise to go to Church next Sunday. After some general conversation of this kind, we sat down to a light Supper, and the next morning assembled at the same place as the day before, where being all seated, I observed, that the foregoing Week our Conferences had been carried on for a longer time, and with less interruption than I had ever known, or well cou'd be, in town, where Mens hours are so broken by visits, business, and amusements, that whoever is content to form his notions from conversation only, must needs have them

very

very shatter'd and imperfect. And what have we got, replied *Alciphron*, by all these continued Conferences? For my part, I think my self just where I was, with respect to the main point that divides us, the Truth of the Christian Religion. I answered, That so many points had been examined, discussed, and agreed between him and his adversaries, that I hoped to see them come to an intire agreement in the end. For in the first place, said I, the principles and opinions of those who are called Free-thinkers, or Minute Philosophers, have been pretty clearly explained. It hath been also agreed, that Vice is not of that benefit to the Nation, which some Men imagine: That Virtue is highly useful to Mankind: But that the beauty of Virtue is not alone sufficient to engage them in the practice of it: That therefore the belief of a God and Providence ought to be encouraged in the State, and tolerated in good Company, as a useful notion. Further, it hath been proved that there is a God: That it is reasonable to worship him: And that the Worship, Faith, and Principles prescribed by the Christian Religion have a useful tendency. Admit, replied *Alciphron*, addressing himself to *Crito*, all that *Dion* saith to be true: Yet this doth not hinder my being just where I was, with respect to the main point. Since there is nothing in all this that proves the Truth of the Christian Religion: Though each of those particulars enumerated may, perhaps, prejudice in its favour. I am therefore to suspect my self at present for a prejudiced person; prejudiced, I say, in favour of Christianity. This, as I am a lover of Truth, puts me upon my guard against deception. I must therefore look sharp, and well consider every step I take.

II. CRI. You may remember, *Alciphron*, you proposed for the subject of our present conference the consideration of certain Difficulties and Objections, which you had to offer against the Christian Religion. We are now ready to hear and consider whatever you shall think fit to produce of that kind. Atheism, and a wrong notion of Christianity, as of something hurtful to Mankind, are great Prejudices; the removal of which may dispose a Man to argue with candor and submit to reasonable proof: But the removing Prejudices against an opinion, is not to be reckoned prejudicing in its favour. It may be hoped therefore, that you will be able to do justice to your cause, without being fond of it. ALC. O *Crito*! that Man may thank his stars to whom Nature hath given a sublime Soul, who can raise himself above popular opinions, and, looking down on the herd of Mankind, behold them scattered over the surface of the whole earth, divided and subdivided into numberless Nations and Tribes, differing in Notions and Tenets, as in Language, Manners, and Dress. The Man who takes a general view of the World and its Inhabitants, from this lofty stand, above the reach of Prejudice, seems to breathe a purer air, and to see by a clearer light: But how to impart this clear and extensive view to those who are wandering beneath in the narrow dark paths of Error! This indeed is a hard task; but, hard as it is, I shall try if by any means,

Clara tuæ possim præpandere lumina menti.

Lucret.

Know then, that all the various Casts or Sects of the sons of Men have each their Faith, and their religious

religious System, germinating and sprouting forth from that common grain of Enthusiasm, which is an original ingredient in the composition of Humane Nature, they shall each tell of intercourse with the invisible World, Revelations from Heaven, divine Oracles, and the like. All which pretensions, when I regard with an impartial eye, it is impossible I shou'd assent to all, and I find within my self something that withholds me from assenting to any of them. For although I may be willing to follow, so far as common Sense, and the light of Nature lead; yet the same reason that bids me yield to rational proof, forbids me to admit opinions without proof. This holds in general against all Revelations whatsoever. And be this my first Objection against the Christian in particular. *CRI.* As this Objection supposes there is no proof or reason for believing the Christian, if good reason can be assigned for such belief, it comes to nothing. Now I presume you will grant, the authority of the reporter is a true and proper reason for believing reports; And the better this authority, the juster claim it hath to our assent: But the authority of God is on all accounts the best: Whatever therefore comes from God, it is most reasonable to believe.

III. *ALC.* This I grant, but then it must be proved to come from God. *CRI.* And are not Miracles, and the accomplishments of Prophecies, joined with the excellency of its Doctrine, a sufficient proof that the Christian Religion came from God? *ALC.* Miracles, indeed, wou'd prove something: But what proof have we of these Miracles? *CRI.* Proof of the same kind that we have or can have of any facts done a great way off, and a long time ago. We have authentic accounts transmitted down to us from eye-witnesses, whom we can-

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not conceive tempted to impose upon us by any humane Motive whatsoever; inasmuch as they acted therein contrary to their Interests, their Prejudices, and the very Principles in which they had been nursed and educated. These accounts were confirmed by the unparallel'd subversion of the City of *Jerusalem*, and the dispersion of the *Jewish* Nation, which is a standing testimony to the Truth of the Gospel, particularly of the Predictions of our blessed Saviour. These accounts, within less than a Century, were spread throughout the World, and believed by great numbers of People. These same accounts were committed to writing, translated into several languages, and handed down with the same respect and consent of Christians in the most distant Churches. Do you not see, said *Alciphron*, staring full at *Crito*, that all this hangs by Tradition? And Tradition, take my word for it, gives but a weak hold: It is a chain, whereof the first links may be stronger than steel, and yet the last weak as wax, and brittle as glass. Imagine a picture copied successively by an hundred Painters, one from another; how like must the last copy be to the original! How lively and distinct will an image be, after an hundred reflections between two parallel Mirrours! Thus like, and thus lively do I think a faint vanishing Tradition, at the end of sixteen or seventeen hundred years. Some Men have a false heart, others a wrong head; and where both are true, the memory may be treacherous. Hence there is still something added, something omitted, and something varied from the Truth: And the sum of many such additions, deductions, and alterations, accumulated for several ages, do, at the foot of the account, make quite another thing. *CRI.* Ancient facts we may know by Tradition, oral or written: And this latter we may divide into two kinds, private and public, as

Writings

Writings are kept in the hands of particular Men, or recorded in public Archives. Now all these three sorts of Tradition, for ought I can see, concur to attest the genuine antiquity of the Gospels. And they are strengthened by collateral evidence from Rites instituted, Festivals observed, and Monuments erected by ancient Christians, such as Churches, Baptisteries, and Sepulchres. Now allowing your objection holds against oral Tradition, singly taken, yet I can think it no such difficult thing to transcribe faithfully. And things once committed to writing, are secure from slips of memory, and may with common care be preserved intire so long as the Manuscript lasts: And this, experience shews may be above a thousand years. The *Alexandrine* Manuscript is allowed to be above twelve hundred years old; and it is highly probable there were then extant copies four hundred years old. A Tradition therefore of above sixteen hundred years, need have only two or three links in its chain. And these links, notwithstanding that great length of time, may be very sound and intire. Since no reasonable Man will deny, that an ancient Manuscript may be of much the same credit now, as when it was first written. We have it on good authority, and it seems probable, that the primitive Christians were careful to transcribe copies of the Gospels and Epistles for their private use, and that other copies were preserved as public records, in the several Churches throughout the World, and that portions thereof were constantly read in their assemblies. Can more be said to prove the writings of Classic Authors, or ancient Records of any kind authentic? *Alciphron*, addressing his discourse to *Euphranor*, said, It is one thing to silence an adversary, and another to convince him. What do you think, *Euphranor*? *EUPH.* Doubtless it is. *ALC.*

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But what I want, is to be convinced. *EUPH.* That point is not so clear. *ALC.* But if a Man had ever so much mind, he cannot be convinced by probable arguments against Demonstration. *EUPH.* I grant he cannot.

IV. *ALC.* Now it is as evident as demonstration can make it, that no divine Faith can possibly be built upon Tradition. Suppose an honest credulous Countryman catechised and lectured every Sunday by his Parish-Priest: It is plain he believes in the Parson, and not in God. He knows nothing of Revelations, and Doctrines, and Miracles, but what the Priest tells him. This he believes, and this Faith is purely humane. If you say he has the Liturgy and the Bible for the foundation of his Faith, the difficulty still recurs. For as to the Liturgy, he pins his faith upon the civil Magistrate, as well as the Ecclesiastic: neither of which can pretend divine Inspiration. Then for the Bible, he takes both that and his Prayer-Book on trust from the Printer, who, he believes, made true Editions from true Copies. You see then faith, but what faith? Faith in the Priest, in the Magistrate, in the Printer, Editor, Transcriber, none of which can with any pretence be called Divine. I had the hint from *Cratylus*; it is a shaft out of his quiver, and believe me, a keen one. *EUPH.* Let me take and make trial of this same shaft in my hands. Suppose then your Countryman hears a Magistrate declare the Law from the Bench, or suppose he reads it in a Statute Book. What think you, is the Printer or the Justice the true and proper object of his Faith and Submission? Or do you acknowledge a higher authority whereon to found those loyal acts, and in which they do really terminate? Again suppose you read a passage in *Tacitus* that you believe true; wou'd you say you assented to it on the authority of the Printer

Dial. VI. PHILOSOPHER. 9

Printer or Transcriber rather than the Historian?

ALC. Perhaps I wou'd, and perhaps I wou'd not.

I do not think my self obliged to answer these points.

What is this but transferring the question from one

subject to another? That which we considered was

neither Law nor prophane History, but religious

Tradition, and Divine Faith. I see plainly what you

aim at, but shall never take for an answer to one dif-

ficulty, the starting of another. *CR I.* O *Al-*

cipbron, there is no taking hold of you who expect

that others shou'd (as you were pleased to express

it) hold fair and stand firm, while you plucked out

their prejudices: How shall he argue with you but

from your concessions, and how can he know what

you grant except you will be pleased to tell him?

EUPH. But to save you the trouble, for once I

will suppose an answer. My question admits but

of two answers; take your Choice. From the one

it will follow, that by a parity of reason we can

easily conceive, how a Man may have Divine Faith,

though he never felt Inspiration or saw a Miracle:

inasmuch as it is equally possible for the mind,

through whatever conduit, oral or scriptural, di-

vine Revelation be derived, to carry its thought and

submission up to the source and terminate its faith,

not in Humane but Divine authority: not in the

instrument or vessel of conveyance, but in the great

origine it self as its proper and true object. From

the other answer it will follow, that you introduce

a general scepticism into Humane Knowledge, and

break down the hinges on which civil Government,

and all the affairs of the World turn and depend:

in a word that you wou'd destroy Humane Faith

to get rid of Divine. And how this agrees with

your professing that you want to be convinced I leave

you to consider.

V. *ALC.* I shou'd in earnest be glad to be con-

vinced one way or other, and come to some conclu-

sion.

clusion. But I have so many objections in store, you are not to count much upon getting over one. Depend on it you shall find me behave like a Gentleman and lover of Truth. I will propose my objections briefly and plainly, and accept of reasonable answers as fast as you can give them. Come, *Euphranor*, make the most of your Tradition; you can never make that a constant and universal one, which is acknowledged to have been unknown, or at best disputed in the Church for several Ages: And this is the Case of the Canon of the new Testament. For though we have now a Canon as they call it settled; yet every one must see and own that Tradition cannot grow stronger by Age; and that what was uncertain in the primitive times cannot be undoubted in the subsequent. What say you to this, *Euphranor*? *EUPH.* I shou'd be glad to conceive your meaning clearly before I return an answer. It seems to me this objection of yours supposeth, that where a Tradition hath been constant and undisputed, such Tradition may be admitted as a proof, but that where the Tradition is defective, the proof must be so too. Is this your meaning? *ALC.* It is. *EUPH.* Consequently the Gospels and Epistles of *St. Paul*, which were universally received in the beginning, and never since doubted of by the Church, must, notwithstanding this objection, be in reason admitted for genuine. And if these Books contain, as they really do, all those points that come into controversy between you and me; what need I dispute with you about the authority of some other Books of the new Testament, which came later to be generally known and received in the Church? If a Man assents to the undisputed Books he is no longer an Infidel; though he shou'd not hold the Revelations, or the Epistle of *S. James* or *Jude*, or the latter of *S. Peter*, or the two last of *S. John* to be Canonical.

The

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The additional authority of these portions of Holy Scripture may have its weight, in particular controversies between Christians, but can add nothing to arguments against an Infidel as such. Wherefore though I believe good reasons may be assigned for receiving these Books, yet these reasons seem now beside our purpose. When you are a Christian it will be then time enough to argue this point. And you will be the nearer being so, if the way be shorten'd by omitting it for the present. *ALC.* Not so near neither as you perhaps imagine: For, notwithstanding all the fair and plausible things you may say about Tradition, when I consider the Spirit of Forgery which reigned in the primitive times, and reflect on the several Gospels, Acts, and Epistles attributed to the Apostles, which yet are acknowledged to be spurious, I confess, I cannot help suspecting the whole. *EUPH.* Tell me, *Alciphron*, do you suspect all *Plato's* Writings for spurious, because the Dialogue upon Death, for instance, is allowed to be so? Or will you admit none of *Tully's* Writings to be genuine, because *Sigonius* imposed a Book of his own writing for *Tully's* Treatise *de Consolatione*, and the imposture passed for some time on the World? *ALC.* Suppose I admit for the Works of *Tully* and *Plato* those that commonly pass for such. What then? *EUPH.* Why then I wou'd fain know, whether it be equal and impartial in a Free-thinker, to measure the credibility of profane and sacred Books by a different rule. Let us know upon what foot we Christians are to argue with Minute Philosophers; whether we may be allowed the benefit of common maxims in Logic and Criticism? If we may, be pleased to assign a reason why supposititious Writings, which in the style and manner and matter bear visible marks of imposture, and have accordingly been rejected by the Church, can be made

made an argument against those which have been universally received, and handed down by an unanimous constant Tradition. There have been in all Ages and in all great Societies of Men, many capricious, vain or wicked Impostors, who for different ends have abused the World by spurious Writings, and created work for Critics both in profane and sacred Learning. And it would seem as silly to reject the true Writings of profane Authors for the sake of the spurious, as it wou'd seem unreasonable to suppose, that among the Hereticks and several Sects of Christians, there shou'd be none capable of the like Imposture.

VI. *ALC.* But, be the Tradition ever so well attested, and the Books ever so genuine, yet I cannot suppose them wrote by persons divinely inspired, so long as I see in them certain Characters inconsistent with such a supposition. Surely the purest language, the most perfect style, the exactest method, and in a word all the excellencies of good writing, might be expected in a piece composed or dictated by the Spirit of God: But Books, wherein we find the reverse of all this, it were impious, not, to reject, but, to attribute to the Divinity. *EUPH.* Say, *Alciphron*, are the Lakes, the Rivers, or the Ocean bounded by straight Lines? Are the Hills and Mountains exact Cones or Pyramids? or the Stars cast into regular figures? *ALC.* They are not. *EUPH.* But in the works of Insects, we may observe figures as exact as if they were drawn by the rule and compass. *ALC.* We may. *EUPH.* Shou'd it not seem therefore that a regular exactness, or scrupulous attention to what Men call the rules of art, is not observed in the great productions of the Author of Nature? *ALC.* It shou'd. *EUPH.* And when a great Prince declareth his Will in Laws and Edicts to his

his Subjects, is he careful about a pure style or elegant composition? Does he not leave his Secretaries and Clerks to express his sense in their own words? Is not the phrase on such occasions thought proper if it conveys as much as was intended? And wou'd not the divine strain of certain modern Critics be judged affected and improper for such uses?

ALC. It must be owned, Laws and Edicts and Grants, for Solœcism and Tautology, are very offensive to the harmonious ears of a fine Writer.

EUPH. Why then shou'd we expect in the Oracles of God an exactness, that wou'd be misbecoming and beneath the dignity of an earthly Monarch, and which bears no proportion or resemblance to the magnificent works of the Creation? *ALC.*

But granting that a nice regard to particles and critical rules is a thing too little and mean to be expected in Divine Revelations; and that there is more force and spirit and true greatness in a negligent, unequal style, than in the well-turned periods of a polite writer; Yet what is all this to the bald and flat compositions of those you call the Divine Penmen? I can never be persuaded, the supreme Being wou'd pick out the poorest and meanest of scriblers for his Secretaries. *EUPH.* O *Alciphron*, if I durst follow my own judgment, I shou'd be apt to think there are noble beauties in the style of the Holy Scripture: in the narrative parts a strain so simple and unaffected; in the devotional and prophetic, so animated and sublime: and in the doctrinal parts such an air of dignity and authority as seems to speak their original divine. But I shall not enter into a dispute about Taste; much less set up my judgment on so nice a point against that of the wits, and Men of genius, with which your Sect abounds. And I have no temptation to it, inasmuch as it seems to me, the Oracles of God are not the less so for being delivered in a plain dress
rather

rather than in *the enticing words of Man's wisdom.*
ALC. This may perhaps be an apology for some simplicity and negligence in writing.

VII. But what apology can be made for Nonsense, crude Nonsense? Of which I cou'd easily assign many instances, having once in my Life read the Scripture through with that very view. Look here, said he, opening a Bible, in the forty ninth Psalm, the Author begins very magnificently, calling upon all the inhabitants of the Earth to give ear, and assuring them his mouth shall speak of wisdom, and the meditation of his heart shall be of understanding.

Quid dignum tanto feret hic promissor biatu?

He hath no sooner done with his Preface, but he puts this senseless question. "Wherefore shou'd I fear in the days of evil; when the wickedness of my heels shall compass me about? The iniquity of my heels! What Nonsense after such a solemn introduction! *EUPH.* For my own part, I have naturally weak eyes, and know there are many things that I cannot see, which are nevertheless distinctly seen by others. I do not therefore conclude a thing to be absolutely invisible; because it is so to me: And since it is possible it may be with my understanding, as it is with my eyes, I dare not pronounce a thing to be Nonsense, because I do not understand it. Of this passage many interpretations are given. The word render'd heels may signify fraud or supplantation: By some it is translated past wickedness, the heel being the hinder part of the foot; by others iniquity in the end of my days, the heel being one extremity of the body; by some the iniquity of my Enemies that may supplant me; by others my own faults

or

or iniquities which I have passed over as light matters, and trampled under my feet. Some render it the iniquity of my ways ; others my transgressions which are like slips and slidings of the heel : And after all might not this expression so harsh and odd to *English* ears have been very natural and obvious in the *Hebrew* Tongue, which, as every other Language, had its idioms? the force and propriety whereof may as easily be conceived lost in a long tract of time, as the signification of some *Hebrew* words, which are not now intelligible, though nobody doubts but they had once a meaning as well as the other words of that Language. Granting therefore that certain passages in the Holy Scripture may not be understood, it will not thence follow that its Penmen wrote Nonsense : For I conceive Nonsense to be one thing and unintelligible another. CRI. An *English* Gentleman of my acquaintance one day entertaining some Foreigners at his House, sent a Servant to know the occasion of a sudden tumult in the yard, who brought him word, the Horses were fallen together by the ears : his Guests inquiring what the matter was, he translates it literally ; *Les Chevaux sont tombez ensemble par les oreilles*. Which made them stare ; what expressed a very plain sense in the original *English*, being incomprehensible when rendered word for word into *French* : And I remember to have heard a Man excuse the bulls of his Countrymen, by supposing them so many literal translations. EU PH. But not to grow tedious, I refer to the Critics and and Commentators where you will find the use of this remark, which clearing up several obscure passages you took for Nonsense, may possibly incline you to suspect your own judgment of the rest. In this very Psalm you have pitched on, the good sense and moral contained in what follows, shou'd, methinks, make a candid reader judge favourably of

of the original sense of the Author, in that part which he cou'd not understand. Say, *Alciphron*, in reading the Classics, do you forthwith conclude every passage to be Nonsense, that you cannot make sense of? *ALC.* By no means; difficulties must be supposed to rise from different idioms, old customs, hints and allusions, clear in one time or place, and obscure in another. *EUPH.* And why will you not judge of Scripture by the same rule. Those sources of obscurity you mention are all common both to sacred and profane Writings: And there is no doubt, but an exacter knowledge in Language and Circumstances wou'd in both, cause difficulties to vanish like shades before the light of the Sun. *Jeremiah* to describe a furious invader saith; *Behold, he shall come up as a Lion from the swelling of Jordan against the habitation of the strong.* One wou'd be apt to think this passage odd and improper, and that it had been more reasonable to have said, *a Lion from the mountain or the desert.* But travellers, as an ingenious Man observes, who have seen the River *Jordan* bounded by low Lands with many reeds or thickets affording shelter to wild Beasts, (which being suddenly dislodged by a rapid overflowing of the River, rush into the upland Country) perceive the force and propriety of the Comparison; and that the difficulty proceeds, not from Nonsense in the Writer, but from Ignorance in the Reader. It is needless to amass together instances which may be found in every Commentator: I only beg leave to observe, that sometimes Men, looking higher or deeper than they need for a profound or remote sense, overlook the natural obvious sense, lying, if I may so say, at their feet, and so make difficulties instead of finding them. This seems to be the case of that celebrated passage, which hath created so much work in *St. Paul's* first Epistle to the *Corinthians*. 'What shall

‘ shall they do which are baptized for the dead, if
 ‘ the dead rise not at all? why are they then bap-
 ‘ tized for the dead? I remember to have heard
 this text explained by *Laches* the Vicar of our
 Parish to my Neighbour *Lycon*, who was much
 perplexed about its meaning. If it had been tran-
 slated as it might very justly, *baptized for the sake*
of the dead, I do not see, said *Laches*, why people
 shou’d be puzzled about the sense of this passage;
 for tell me, I beseech you, for whose sake do you
 think those Christians were baptized? For whose
 sake, answered *Lycon*, but their own? How do
 you mean, for their own sake in this life, or the
 next? Doubtless in the next, for it was plain they
 could get nothing by it in this. They were then,
 replied *Laches*, baptized not for the sake of them-
 selves while living, but for the sake of themselves
 when dead; not for the living, but the dead. I
 grant it. Baptism therefore must have been to
 them a fruitless thing, if the dead rise not at all.
 It must. Whence *Laches* inferred, That *St. Paul’s*
 argument was clear and pertinent for the Resur-
 rection: And *Lycon* allowed it to be *argumentum*
ad hominem to those who had sought Baptism.
 There is then, concluded *Laches*, no necessity for
 supposing, that living Men were in those days bap-
 tized instead of those who died without Baptism,
 or of running into any other odd Suppositions, or
 strained and far-fetched Interpretations to make
 sense of this passage. *ALC.* Here and there a
 difficult passage may be cleared: But there are
 many which no art or wit of Man can account for,
 What say you to those discoveries, made by some
 of our learned Writers, of false citations from
 the Old Testament found in the Gospel? *EUPH.*
 That some few passages are cited by the Writers
 of the New Testament, out of the Old, and by
 the Fathers out of the New, which are not in so
 Vol. II, C 5 many

many words to be found in them, is no new discovery of Minute Philosophers, but known and observed long before by Christian Writers; who have made no scruple to grant, that some things might have been inserted by careless or mistaken Transcribers into the Text, from the Margin, others left out, and others altered; whence so many various readings. But these are things of small moment, and that all other ancient Authors have been subject to; and upon which no point of Doctrine depends, which may not be proved without them. Nay further, if it be any advantage to your cause, it hath been observed, that the eighteenth *Psalm*, as recited in the twenty second chapter of the second book of *Samuel*, varies in above forty places, if you regard every little verbal or literal difference: And that a Critic may now and then discover small variations, is what no body can deny. But to make the most of these concessions, what can you infer from them, more than that the design of the Holy Scripture was not to make us exactly knowing in Circumstantials? and that the Spirit did not dictate every Particle and Syllable, or preserve them from every minute alteration by Miracle? which to believe, wou'd look like Rabbinical Superstition. *ALC.* But what marks of Divinity can possibly be in writings which do not reach the exactness even of Humane Art? *EUPH.* I never thought nor expected that the Holy Scripture shou'd shew it self divine, by a circumstantial accuracy of Narration, by exactness of Method, by strictly observing the rules of Rhetoric, Grammar, and Criticism, in harmonious Periods, in elegant and choice Expressions, or in technical Definitions and Partitions. These things wou'd look too like a Humane Composition. Methinks there is in that simple, unaffected, artless, unequal, bold, figurative Style of the Holy Scripture, a character singularly

gularly great and majestic, and that looks more like divine Inspiration, than any other Composition that I know. But, as I said before, I shall not dispute a point of Criticism with the gentlemen of your Sect, who, it seems, are the modern standard for Wit and Taste. *ALC.* Well, I shall not insist on small slips, or the inaccuracy of citing or transcribing: And I freely own, that Repetitions, want of Method, or want of Exactness in circumstances, are not the things that chiefly stick with me; no more than the plain patriarchal Manners, or the peculiar Usages and Customs of the Jews and first Christians so different from ours; and that to reject the Scripture on such accounts wou'd be to act like those *French* Wits, who censure *Homer* because they do not find in him the Style, Notions and Manners of their own Age and Country. Was there nothing else to divide us, I shou'd make no great difficulty of owning, That a popular uncorrected Style might answer the general ends of Revelation, as well, perhaps, as a more critical and exact one: But the Obscurity still sticks with me. Methinks if the supreme Being had spoke to Man, he wou'd have spoke clearly to him, and that the Word of God shou'd not need a comment.

VIII. *EUPH.* You seem, *Alciphron*, to think Obscurity a defect; but if it shou'd prove to be no defect, there wou'd then be no force in this Objection. *ALC.* I grant there wou'd not. *EUPH.* Pray tell me, are not Speech and Style instrumental to convey Thoughts and Notions, to beget Knowledge, Opinion, and Assent? *ALC.* This is true. *EUPH.* And is not the perfection of an instrument to be measured by the use to which it is subservient? *ALC.* It is. *EUPH.* What therefore is a defect in one instrument, may be none in another. For instance, edged tools are in general
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designed to cut ; but the uses of an Ax and a Razor being different, it is no defect in an Ax, that it hath not the keen edge of a Razor ; nor in a Razor, that it hath not the weight or strength of an Ax. *ALC.* I acknowledge this to be true. *EUPH.* And may we not say in general, that every instrument is perfect, which answers the purpose or intention of him who useth it? *ALC.* We may. *EUPH.* Hence it seems to follow, that no Man's Speech is defective in point of Clearness, though it shou'd not be intelligible to all Men, if it be sufficiently so to those who, he intended, shou'd understand it ; or though it shou'd not in all parts be equally clear, or convey a perfect knowledge, where he intended only an imperfect hint. *ALC.* It seems so. *EUPH.* Ought we not therefore to know the intention of the Speaker, to be able to know whether his style be obscure through defect or design? *ALC.* We ought. *EUPH.* But is it possible for Man to know all the ends and purposes of God's Revelations? *ALC.* It is not. *EUPH.* How then can you tell, but the obscurity of some parts of Scripture may well consist with the purpose which you know not, and consequently be no argument against its coming from God? The books of Holy Scripture were written in ancient languages, at distant times, on sundry occasions, and very different subjects: Is it not therefore reasonable to imagine, that some parts or passages might have been clearly enough understood by those, for whose proper use they were principally designed, and yet seem obscure to us, who speak another language, and live in other times? Is it at all absurd or unsuitable to the notion we have of God or Man, to suppose that God may reveal, and yet reveal with a reserve, upon certain remote and sublime subjects, content to give us hints and glimpses, rather than views? May we not also suppose

pose from the reason of things, and the analogy of Nature, that some points, which might otherwise have been more clearly explained, were left obscure merely to encourage our diligence and modesty? Two virtues, which, if it might not seem disrespectful to such great Men, I wou'd recommend to the Minute Philosophers. *Lyficles* replied, This indeed is excellent: You expect that Men of sense and spirit shou'd in great humility put out their eyes, and blindly swallow all the absurdities and nonsense that shall be offered to them for divine Revelation. *EUPH.* On the contrary, I wou'd have them open their eyes, look sharply, and try the Spirit, whether it is of God; and not supinely and ignorantly condemn in the gross, all Religions together, Piety with Superstition, Truth for the sake of Error, matters of Fact for the sake of Fictions; a conduct, which at first sight wou'd seem absurd in History, Physick, or any other branch of Humane Inquiry: But to compare the Christian System, or Holy Scriptures, with other pretences to divine Revelation, to consider impartially the Doctrines, Precepts, and Events therein contained; weigh them in the balance with any other religious, natural, moral, or historical accounts; and diligently to examine all those proofs internal and external, that for so many ages have been able to influence and persuade so many wise, learned and inquisitive Men: Perhaps they might find in it certain peculiar characters, which sufficiently distinguish it from all other Religions and pretended Revelations, whereon to ground a reasonable Faith. In which case I leave them to consider, whether it wou'd be right to reject with peremptory scorn a Revelation so distinguished and attested, upon account of Obscurity in some parts of it? and whether it wou'd seem beneath Men of their Sense and Spirit to acknowledge, that, for ought they know,

a light inadæquate to things, may yet be adæquate to the purpose of Providence? and whether it might be unbecoming their sagacity and critical skill to own, that literal Translations from Books in an ancient Oriental tongue, wherein there are so many peculiarities, as to the manner of writing, the figures of Speech, and structure of the Phrase, so remote from all our modern Idioms, and in which we have no other coæval writings extant, might well be obscure in many places, especially such as treat of subjects sublime and difficult in their own nature, or allude to things, customs or events, very distant from our knowledge? And lastly, whether it might not become their character, as impartial and unprejudiced Men, to consider the Bible in the same light they wou'd profane Authors? They are apt to make great allowance for Transpositions, Omissions, and literal Errors of Transcribers in other ancient Books, and very great for the difference of Style and Manner, especially in eastern Writings, such as the remains of *Zoroaster* and *Confucius*, and why not in the Prophets? In reading *Horace* or *Persius* to make out the sense, they will be at the pains to discover a hidden *Drama*, and why not in *Solomon* or *St. Paul*? I hear there are certain ingenious Men who despise King *David's* Poetry, and yet profess to admire *Homer* and *Pindar*. If there be no prejudice or affectation in this, let them but make a literal version from those Authors into *English* Prose, and they will then be better able to judge of the *Psalms*. *ALC.* You may discourse and expatiate; but notwithstanding all you have said or shall say, it is a clear point that a Revelation, which doth not reveal, can be no better than a contradiction in terms. *EUPH.* Tell me, *Alciphron*, do you not acknowledge the light of the Sun to be the most glorious production of Providence in this natural World?

ALC.

ALC. Suppose I do. *EUPH.* This light, nevertheless, which you cannot deny to be of God's making, shines only on the surface of things, shines not at all in the Night, shines imperfectly in the twilight, is often interrupted, refracted, and obscured, represents distant things, and small things dubiously, imperfectly, or not at all. Is this true or no? *ALC.* It is. *EUPH.* Shou'd it not follow therefore, that to expect in this World a light from God without any mixture of shade or mystery, wou'd be departing from the rule and analogy of the Creation? and that consequently it is no argument the light of Revelation is not Divine, because it may not be so clear and full as you expect. *ALC.* As I profess my self candid and indifferent throughout this debate, I must needs own you say some plausible things, as a Man of argument will never fail to do in vindication of his prejudices.

IX. But, to deal plainly, I must tell you once for all, that you may question and answer, illustrate and enlarge for ever, without being able to convince me that the Christian Religion is of Divine Revelation. I have said several things, and have many more to say, which, believe me, have weight not only with my self, but with many great Men my very good friends, and will have weight whatever *Euphranor* can say to the contrary. *EUPH.* O *Alciphron*, I envy you the happiness of such acquaintance. But, as my lot fallen in this remote corner deprives me of that advantage, I am obliged to make the most of this opportunity, which you and *Lyficles* have put into my hands. I consider you as two able Chirurgeons, and you were pleased to consider me as a Patient, whose cure you have generously undertaken. Now a Patient must have full liberty to explain his case, and tell

all his Symptoms, the concealing or palliating of which might prevent a perfect cure. You will be pleased therefore to understand me, not as objecting to, or arguing against, either your Skill or Medicines, but only as setting forth my own case and the effects they have upon me. Say, *Alci-phron*, did you not give me to understand that you wou'd extirpate my prejudices? *ALC.* It is true: a good Physician eradicates every fibre of the disease. Come, you shall have a patient hearing. *EUPH.* Pray, was it not the opinion of *Plato*, that God inspired particular Men, as Organs or Trumpets, to proclaim and sound forth his Oracles to the World? * And was not the same opinion also embraced by others the greatest Writers of Antiquity? *CRI.* *Soerates* seems to have thought that all true Poets spoke by Inspiration; and *Tully*, that there was no extraordinary Genius without it. This hath made some of our affected Free-thinkers attempt to pass themselves upon the World for Enthusiasts. *ALC.* What wou'd you infer from all this? *EUPH.* I wou'd infer that inspiration shou'd seem nothing impossible or absurd, but rather agreeable to the light of reason and the notions of Mankind. And this, I suppose, you will acknowledge, having made it an Objection against a particular Revelation, that there are so many pretences to it throughout the World. *ALC.* O *Euphranor*, he, who looks into the bottom of things, and resolves them into their first principles, is not easily amused with words. The word *Inspiration* sounds indeed big, but let us, if you please, take an original view of the thing signified by it. To inspire is a word borrowed from the *Latin*, and strictly taken means no more than to breathe or blow in: nothing therefore can be inspired but what can be blown or breathed, and nothing can be so but wind or vapour, which in-

* *Plato in Ione.*

deed may fill or puff up Men with fanatical and hypochondriacal ravings. This sort of Inspiration I very readily admit. *EUPH.* What you say is subtle, and I know not what effect it might have upon me, if your profound discourse did not hinder its own operation. *ALC.* How so? *EUPH.* Tell me, *Alciphron*, do you discourse or do you not? To me it seems that you discourse admirably. *ALC.* Be that as it will, it is certain I discourse. *EUPH.* But when I endeavour to look into the bottom of things, behold! A scruple riseth in my mind how this can be; for to *discourse* is a word of *Latin* derivation, which originally signifies to run about; and a Man cannot run about, but he must change place and move his Legs; so long therefore as you sit on this Bench, you cannot be said to discourse. Solve me this difficulty, and then perhaps I may be able to solve yours. *ALC.* You are to know, that discourse is a word borrowed from sensible things, to express an invisible action of the mind, reasoning or inferring one thing from another; and in this translated sense, we may be said to discourse, though we sit still. *EUPH.* And may we not as well conceive, that the term Inspiration might be borrowed from sensible things to denote an action of God, in an extraordinary manner, influencing, exciting, and enlightening the mind of a Prophet or an Apostle? who, in this secondary, figurative, and translated sense, may truly be said to be inspired, though there shou'd be nothing in the case of that wind or vapour implied in the original sense of the word? It seems to me, that we may by looking into our own minds plainly perceive certain instincts, impulses, and tendencies, which at proper periods and occasions spring up unaccountably in the Soul of Man. We observe very visible signs of the same in all other Animals. And these things being ordinary

dinary and natural, what hinders but we may conceive it possible for the humane Mind, upon an extraordinary account, to be moved in an extraordinary manner, and its faculties stirred up and actuated by a supernatural Power? That there are and have been, and are likely to be wild visions and hypochondriacal ravings, no body can deny; but to infer from thence, that there are no true Inspirations wou'd be too like concluding, that some Men are not in their senses, because other Men are fools. And though I am no Prophet, and consequently cannot pretend to a clear notion of this matter; yet I shall not therefore take upon me to deny, but a true Prophet or inspired Person, might have had as certain means, of discerning between divine Inspiration and hypochondriacal fancy, as you can between sleeping and waking, till you have proved the contrary. You may meet in the Book of *Jeremiah* with this passage: 'The Prophet that hath a dream let him tell a dream: And he that hath my word, let him speak my word faithfully: what is the chaff to the Wheat, saith the Lord? Is not my word like as a fire, saith the Lord, and like a hammer that breaketh the rock in pieces'? * You see here a distinction made between Wheat and Chaff, true and spurious, with the mighty force and power of the former. But I beg pardon for quoting Scripture to you, I make my appeal to the general sense of Mankind, and the Opinion of the wisest Heathens, which seems sufficient to conclude Divine Inspiration possible, if not probable, at least till you prove the contrary.

X. *ALC.* The possibility of Inspirations and Revelations I do not think it necessary to deny. Make the best you can of this concession. *EUPH.*

Jerem. c. xxiii. 28. 29.

Now

Now what is allowed possible we may suppose in fact. *ALC.* We may. *EUPH.* Let us then suppose, that God had been pleased to make a Revelation to Men; and that he inspired some as a means to instruct others. Having supposed this, can you deny, that their inspired Discourses and Revelations might have been committed to Writing, or that being written, after a long tract of time they might become in several places obscure; that some of them might even originally have been less clear than others, or that they might suffer some alteration by frequent transcribing, as other Writings are known to have done? Is it not even very probable that all these things wou'd happen? *ALC.* I grant it. *EUPH.* And granting this, with what pretence can you reject the Holy Scriptures as not being divine, upon the account of such signs or marks, as you acknowledge wou'd probably attend a Divine Revelation transmitted down to us through so many Ages? *ALC.* But allowing all that in reason you can desire, and granting that this may account for some obscurity, may reconcile some small differences, or satisfy us how some difficulties might arise by inserting, omitting or changing here and there a letter, a word, or perhaps a sentence: Yet these are but small matters, in respect of the much more considerable and weighty objections I cou'd produce, against the confessed doctrines, or subject matter of those Writings. Let us see what is contained in these sacred Books, and then judge whether it is probable or possible, such Revelations shou'd ever have been made by God? Now I defy the wit of Man to contrive any thing more extravagant, than the accounts we there find of Apparitions, Devils, Miracles, God manifest in the flesh, Regeneration, Grace, Self-denial, Resurrection of the dead, and such like *ægri somnia*: things so odd,
unaccoun-

unaccountable, and remote from the apprehension of Mankind, you may as soon wash a Blackamore white, as clear them of absurdity. No critical skill can justify them, no tradition recommend them, I will not say for Divine Revelations, but even for the inventions of Men of Sense. *EUPH.* I had always a great opinion of your sagacity, but now, *Alciphron*, I consider you as something more than Man; else how shou'd it be possible for you to know, what or how far it may be proper for God to reveal? Methinks it may consist with all due deference to the greatest of Humane Understandings, to suppose them ignorant of many things, which are not suited to their faculties, or lie out of their reach. Even the Counsels of Princes lie often beyond the ken of their Subjects, who can only know so much as is revealed by those at the helm; and are often unqualified to judge of the usefulness and tendency even of that, till in due time the scheme unfolds, and is accounted for by succeeding events. That many points contained in holy Scripture are remote from the common apprehensions of Mankind, cannot be denied. But I do not see, that it follows from thence they are not of Divine Revelation. On the contrary, shou'd it not seem reasonable to suppose, that a Revelation from God shou'd contain something different in kind, or more excellent in degree, than what lay open to the common sense of Men, or cou'd even be discovered by the most sagacious Philosopher? Accounts of separate Spirits, good or bad, Prophecies, Miracles and such things are undoubtedly strange; but I wou'd fain see how you can prove them impossible or absurd. *ALC.* Some things there are so evidently absurd, that it wou'd be almost as silly to disprove them as to believe them: and I take these to be of that class.

XI. *EUPH.* But is it not possible, some Men may shew as much prejudice and narrowness in rejecting all such accounts, as others might easiness and credulity in admitting them? I never durst make my own observation or experience, the rule and measure of things spiritual, supernatural, or relating to another World, because I shou'd think it a very bad one, even for the visible and natural things of this; It wou'd be judging like the *Siamese*, who was positive it did not freeze in *Holland*, because he had never known such a thing as hard water or ice in his own Country. I cannot comprehend why any one, who admits the union of the Soul and Body, shou'd pronounce it impossible for the Humane Nature to be united to the Divine; in a manner ineffable and incomprehensible by Reason. Neither can I see any absurdity in admitting, that sinful Man may become regenerate or a new Creature, by the grace of God reclaiming him from a carnal Life to a spiritual Life of Virtue and Holiness. And since, the being governed by Sense and Appetite is contrary to the happiness and perfection of a rational Creature, I do not at all wonder that we are prescribed Self-denial. As for the Resurrection of the dead, I do not conceive it so very contrary to the Analogy of Nature, when I behold Vegetables left to rot in the earth, rise up again with new Life and Vigour, or a Worm to all appearance dead change its Nature, and that, which in its first being crawled on the Earth, become a new species, and fly abroad with Wings. And indeed when I consider, that the Soul and Body are things so very different and heterogeneous, I can see no reason to be positive, that the one must necessarily be extinguished upon the dissolution of the other; especially since I find in my self a strong natural desire of Immortality

lity, and I have not observed that natural Appetites are wont to be given in vain, or meerly to be frustrated. Upon the whole those points, which you account extravagant and absurd, I dare not pronounce to be so till I see good reason for it.

XII. C R I. No, *Alciphron*, your positive airs must not pass for proofs; nor will it suffice to say, things are contrary to common sense, to make us think they are so: By common Sense, I suppose shou'd be meant either the general sense of Mankind, or the improved reason of thinking Men. Now I believe that all those Articles, you have with so much capacity and fire at once summed up and exploded, may be shewn to be not disagreeable, much less contrary to common sense in one or other of these acceptations. That the Gods might appear and converse among Men, and that the Divinity might inhabit Humane Nature, were points allowed by the Heathens; and for this I appeal to their Poets and Philosophers, whose Testimonies are so numerous and clear, that it wou'd be an affront to repeat them to a Man of any Education. And though the notion of a Devil may not be so obvious, or so fully described, yet there appear plain traces of it, either from Reason or Tradition. The latter *Platonists*, as *Porphry* and *Iamblichus*, are very clear in the point, allowing that evil Dæmons delude and tempt, hurt and possess Mankind. That the ancient *Greeks*, *Chaldeans*, and *Ægyptians*, believed both good and bad Angels, may be plainly collected from *Plato*, *Plutarch*, and the *Chaldean* Oracles. *Origen* observes, That almost all the Gentiles, who held the being of Dæmons, allowed there were bad ones *. There is even something as early as *Homer*, that is thought by the

* *Origen*. l. 7. contra *Celsum*.

learned Cardinal *Bessarion* † to allude to the fall of Satan, in the account of *Ate*, whom the Poet represents as cast down from Heaven by *Jove*, and then wandering about the Earth, doing mischief to Mankind. This same *Ate* is said by *Hesiod*, to be the Daughter of *Discord*; and by *Euripides*, in his *Hippolitus*, is mentioned as a tempter to evil, And it is very remarkable, that *Plutarch*, in his Book, *De vitando ære alieno*, speaks after *Empedocles*, of certain Dæmons that fell from Heaven, and were banished by God, Δαίμονες θεηλατοὶ καὶ ὑρανότεπῆς. Nor is that less remarkable which is observed by *Ficinus* from *Pherecydes Syrus*, That there had been a downfall of Dæmons who revolted from God; and that *Ophioneus* (the old Serpent) was head of that rebellious Crew *. Then as to other articles, let any one consider what the *Pythagoreans* taught of the Purgation and λύσις, or Deliverance of the Soul: What most Philosophers, but especially the *Stoics*, of subduing our Passions: What *Plato* and *Hierocles* have said of forgiving Injuries: What the acute and sagacious *Aristotle* writes, in his *Ethics* to *Nicomachus*, of the spiritual and divine Life, that Life, which, according to him, is too excellent to be thought Humane; insomuch as Man, so far forth as Man, cannot attain to it, but only so far forth as he hath something divine in him: And particularly, let him reflect on what *Socrates* taught, to wit, That Virtue is not to be learned from Men, that it is the Gift of God, and that good Men are not good by virtue of Humane Care or Diligence, ἐκ εἶναι ἀνθρωπίνην ἐπιμέλειαν ἢ ἀγαθοὶ ἀγαθοὶ γίγνονται †. Let any Man, who really thinks, but consider what other thinking Men have thought, who cannot be supposed prejudiced in

† In calumniat. Platonis. l. 3. c. 7.

* Vid. Argum. in Phædrum Platonis.

† Vid. Plat. in Protag. & alibi passim.

favour of Revealed Religion; and he will see cause, if not to think with reverence of the Christian Doctrines of Grace, Self-denial, Regeneration, Sanctification, and the rest, even the most mysterious, at least to judge more modestly and warily, than those who shall, with a confident air, pronounce them absurd, and repugnant to the Reason of Mankind. And in regard to a future State, the common sense of the Gentile World, modern or ancient, and the opinions of the wisest Men of Antiquity, are things so well known, that I need say nothing about them. To me it seems, the Minute Philosophers, when they appeal to Reason and common Sense, mean only the Sense of their own Party: A coin, how current soever among themselves, that other Men will bring to the touchstone, and pass for no more than it is worth. *LYS.* Be those notions agreeable to what or whose Sense they may, they are not agreeable to mine. And if I am thought ignorant for this, I pity those who think me so.

XIII. I enjoy my self, and follow my own courses, without remorse or fear; which I should not do, if my Head were filled with Enthusiasm; whether Gentile or Christian, Philosophical or Revealed, it is all one to me. Let others know or believe what they can, and make the best on't, I, for my part, am happy and safe in my Ignorance, *CRI.* Perhaps not so safe neither. *LYS.* Why, surely you won't pretend that Ignorance is criminal? *CRI.* Ignorance alone is not a crime. But that wilful Ignorance, affected Ignorance, Ignorance from Sloth, or conceited Ignorance, is a fault, might easily be proved by the testimony of Heathen Writers; and it needs no proof to shew, that if Ignorance be our fault, we cannot be secure in it as an excuse. *LYS.* Honest *Crito* seems to hint, that

that a Man shou'd take care to inform himself, while alive, lest his neglect be punished when he is dead. Nothing is so pusillanimous and unbecoming a Gentleman, as Fear: Nor cou'd you take a likelier course to fix and rivet a Man of honour in Guilt, than by attempting to frighten him out of it. This is the stale, absurd Stratagem of Priests, and that which makes them, and their Religion, more odious and contemptible to me than all the other Articles put together. *CRI.* I wou'd fain know why it may not be reasonable for a Man of honour, or any Man who has done amiss to fear? Guilt is the natural Parent of fear; and nature is not used to make men fear where there is no occasion. That impious and profane Men shou'd expect divine punishment, doth not seem so absurd to conceive: And that under this expectation they shou'd be uneasy and even afraid, how consistent soever it may or may not be with honour, I am sure consists with reason. *LYS.* That thing of Hell and eternal Punishment is the most absurd, as well as the most disagreeable thought that ever entered into the head of mortal Man. *CRI.* But you must own that it is not an absurdity peculiar to Christians, since *Socrates*, that great Free-thinker of *Athens*, thought it probable there may be such a thing as impious Men for ever punished in Hell*. It is recorded of this same *Socrates*, that he has been often known to think for four and twenty hours together, fixed in the same posture, and wrapt up in meditation. *LYS.* Our modern Free-thinkers are a more lively sort of Men. Those old Philosophers were most of them whimsical. They had in my judgment a dry, narrow, timorous way of thinking, which by no means came up to the frank humour of our times. *CRI.* But I appeal to your own judgment, if a Man, who knows not the na-

* Vid Platon. in *Gorgia*.

ture of the Soul, can be assured by the light of reason, whether it is mortal or immortal ?

*An simul intereat nobiscum morte perempta,
An tenebras orci visat vastasque lacunas ?*

LYS. But what if I know the nature of the Soul ? What if I have been taught that whole secret by a modern Free-thinker ? a Man of science who discovered it not by a tiresome introversion of his faculties, not by amusing himself in a labyrinth of notions, or stupidly thinking for whole days and nights together, but by looking into things and observing the analogy of nature.

XIV. This great Man is a Philosopher by fire, who has made many processes upon vegetables. It is his opinion that Men and Vegetables are really of the same species ; that Animals are moving Vegetables, and Vegetables fixed Animals ; that the mouths of the one and the roots of the other serve to the same use, differing only in position ; that blossoms and flowers answer to the most indecent and concealed parts in the humane body ; that vegetable and animal bodies are both alike organized, and that in both there is Life or a certain motion and circulation of juices through proper Tubes or Vessels. I shall never forget this able Man's unfolding the nature of the Soul in the following manner. The Soul, said he, is that specific form or principle from whence proceed the distinct qualities or properties of things. Now, as Vegetables are a more simple and less perfect compound, and consequently more easily analysed than Animals, we will begin with the contemplation of the Souls of Vegetables. Know then, that the Soul of any Plant, Rosemary for instance, is neither more nor less than its essential Oil. Upon this depends its peculiar

culiar fragrance, taste, and medicinal virtues, or in other words its life and operations. Separate or extract this essential Oil by Chymic art, and you get the Soul of the Plant : what remains being a dead Carcase, without any one property or virtue of the Plant, which is preserved entire in the Oil, a Drachm whereof goes further than several pounds of the Plant. Now this same essential Oil is it self a composition of Sulphur and Salt, or of a gross unctuous substance, and a fine subtile principle or volatile Salt imprisoned therein. This volatile Salt is properly the essence of the Soul of the Plant, containing all its virtue, and the Oil is the vehicle of this most subtile part of the Soul, or that which fixes and individuates it. And as, upon separation of this Oil from the Plant, the Plant died, so a second death or death of the Soul ensues upon the resolution of this essential Oil into its principles; as appears by leaving it exposed for some time to the open air, so that the volatile Salt or Spirit may fly off; after which the Oil remains dead and insipid, but without any sensible diminution of its weight, by the loss of that volatile essence of the Soul, that æthereal aura, that spark of entity, which returns and mixes with the Solar light, the universal Soul of the World, and only source of Life, whether Vegetable, Animal, or Intellectual ; which differ only according to the grossness or fineness of the vehicles, and the different textures of the natural Alembics, or in other words, the organized Bodies, where the abovementioned volatile essence inhabits and is elaborated, where it acts and is acted upon. This Chymical System lets you at once into the nature of the Soul, and accounts for all it's phænomena. In that compound which is called Man, the Soul or essential Oil is what commonly goes by the name of Animal Spirit : for you must know, it is a point agreed by Chymists, that

Spirits are nothing but the more subtile Oils. Now in proportion, as the essential Oil of Man is more subtile than that of other Creatures, the volatile Salt that impregnates it is more at liberty to act, which accounts for those specific properties and actions of Humane Kind, which distinguish them above other Creatures. Hence you may learn why among the wise ancients, Salt was another name for wit, and in our times a dull Man is said to be insipid or insulse. Aromatic Oils maturated by great length of time turn to Salts: this shews why Humane Kind, grow wiser by age. And what I have said of the twofold death or dissolution, first of the compound, by separating the Soul from the organical Body, and secondly of the Soul it self, by dividing the volatile Salt from the Oil, illustrates and explains that notion of certain ancient Philosophers: that as the Man was a compound of soul and body, so the Soul was compounded of the mind or intellect, and its æthereal vehicle; and that the separation of Soul and Body or death of the Man is, after a long tract of time, succeeded by a second death of the Soul it self, to wit the separation or deliverance of the intellect from its vehicle, and reunion with the Sun. *EUPH.* O *Lyficles* your ingenious friend has opened a new Scene, and explained the most obscure and difficult points in the clearest and easiest manner. *LYS.* I must own this account of things struck my fancy. I am no great lover of Creeds or Systems; but when a notion is reasonable and grounded on experience I know how to value it. *CR I.* In good earnest, *Lyficles*, do you believe this account to be true? *LYS.* Why then in good earnest I don't know whether I do or no. But I can assure you the ingenious Artist himself has not the least doubt about it. And to believe an Artist in his art is a just maxim and short way

to Science. *CRI.* But what relation hath the Soul of Man to Chymic art? The same reason, that bids me trust a skilful Artist in his art, inclines me to suspect him out of his art. Men are too apt to reduce unknown things to the standard of what they know, and bring a prejudice or tincture from things they have been conversant in, to judge thereby of things in which they have not been conversant. I have known a Fidler gravely teach that the Soul was Harmony; a Geometrician very positive that the Soul must be extended; and a Physician, who having pickled half a dozen embryos and dissected as many Rats and Frogs, grew conceited and affirmed there was no Soul at all, and that it was a vulgar error. *LYS.* My notions sit easy. I shall not engage in pedantic disputes about them. They who don't like them may leave them. *EUPH.* This, I suppose, is said much like a Gentleman.

XV. But pray, *Lyficles*, tell me whether the Clergy come within that general rule of yours; that an Artist may be trusted in his art? *LYS.* By no means. *EUPH.* Why so? *LYS.* Because I take my self to know as much of those matters as they do. *EUPH.* But you allow, that in any other profession, one who hath spent much time and pains may attain more knowledge, than a Man of equal or better parts, who never made it his particular business. *LYS.* I do. *EUPH.* And nevertheless in things religious and divine you think all Men equally knowing. *LYS.* I do not say all Men. But I think all Men of sense competent judges. *EUPH.* What! are the divine attributes and dispensations to Mankind, the true end and happiness of rational Creatures, with the means of improving and perfecting their Beings, more easy and obvious points than those which make the subject

ject of every common profession? *LYS.* Perhaps not: but one thing I know, some things are so manifestly absurd, that no authority shall make me give into them. For instance, if all Mankind shou'd pretend to persuade me that the Son of God was born upon earth in a poor Family, was spit upon, buffeted and crucified, lived like a Beggar and died like a Thief, I shou'd never believe one syllable of it. Common sense shews every one, what figure it wou'd be decent for an earthly Prince or Ambassador to make; and the Son of God, upon an embassy from Heaven, must needs have made an appearance beyond all others of great *eclat*, and in all respects the very reverse of that which Jesus Christ is reported to have made, even by his own Historians. *EUPH.* O *Lyficles*, though I had ever so much mind to approve and applaud your ingenious reasoning, yet I dare not assent to this for fear of *Crito*. *LYS.* Why so? *EUPH.* Because he observed just now, that Men judge of things they do not know, by prejudices from things they do know. And I fear he wou'd object that you, who have been conversant in the grand *Monde*, having your head filled with a notion of Attendants and Equipage and Liveries, the familiar badges of Humane Grandeur, are less able to judge of that which is truly divine; and that one who had seen less, and thought more, wou'd be apt to imagine a pompous parade of worldly greatness, not the most becoming the Author of a spiritual Religion, that was designed to wean Men from the world, and raise them above it. *CRI.* Do you think, *Lyficles*, if a Man shou'd make his entrance into *London* in a rich suit of Clothes, with a hundred gilt Coaches, and a thousand laced Footmen; that this wou'd be a more divine appearance, and have more of true grandeur in it, than if he had power with a word to heal all manner of diseases,

to raise the dead to life, and still the raging of the Winds and Sea? *LYS.* Without all doubt it must be very agreeable to common sense to suppose, that he cou'd restore others to life who cou'd not save his own. You tell us, indeed, that he rose again from the dead: but what occasion was there for him to die, the just for the unjust, the Son of God for wicked Men? and why in that individual place? Why at that very time above all others? Why did he not make his appearance earlier, and preach in all parts of the World, that the benefit might have been more extensive? Account for all these points and reconcile them, if you can, to the common notions and plain sense of Mankind. *CRI.* And what if those, as well as many other points, shou'd lie out of the road that we are acquainted with; must we therefore explode them, and make it a rule to condemn every proceeding as senseless, that doth not square with the vulgar sense of Man; If the precepts and certain primary tenets of Religion appear in the eye of Reason good and useful; and if they are also found to be so by their effects; we may, for the sake of them, admit certain other points or doctrines recommended with them, to have a good tendency, to be right and true; although we cannot discern their goodness or truth by the meer light of Humane Reason, which may well be supposed an insufficient judge of the proceedings, counsels, and designs of Providence, and this sufficeth to make our conviction reasonable.

XVI. It is an allowed point that no Man can judge of this or that part of a machine taken by it self, without knowing the whole, the mutual relation or dependence of its parts, and the end for which it was made. And, as this is a point acknowledged in corporeal and natural things, ought we not by a parity of reason to suspend our

judgment of a single unaccountable part of the Divine Oeconomy, till we are more fully acquainted with the moral System, or world of Spirits, and are let into the designs of God's Providence, and have an extensive view of his dispensations past, present, and future? Alas! *Lyficles*, what do you know even of your self, whence you come, what you are, or whither you are going? To me it seems, that a Minute Philosopher is like a conceited Spectator, who never looked behind the Scenes, and yet wou'd judge of the machinery; who from a transient glimpse of a part only of some one scene, wou'd take upon him to censure the plot of a Play. *LYS.* As to the plot I won't say; but in half a Scene a Man may judge of an absurd Actor. With what colour or pretext can you justify the vindictive, froward, whimsical behaviour of some inspired Teachers or Prophets? Particulars that serve neither for profit nor pleasure I make a shift to forget; but in general the truth of this charge I do very well remember. *CRI.* You need be at no pains to prove a point I shall neither justify nor deny. That there have been humane passions, infirmities, and defects in persons inspired by God, I freely own; nay, that very wicked Men have been inspired, as *Balaam* for instance and *Caiaphas*, cannot be denied. But what will you infer from thence? Can you prove it impossible, that a weak or sinful Man shou'd become an instrument to the Spirit of God, for conveying his purpose to other Sinners? Or that Divine Light may not, as well as the light of the Sun, shine on a foul vessel without polluting its rays? *LYS.* To make short work, the right way wou'd be to put out our eyes, and not judge at all. *CRI.* I do not say so, but I think it wou'd be right, if some sanguine persons upon certain points suspected their own judgment. *ALC.* But the very things said to be inspired,
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taken by themselves and in their own nature, are sometimes so wrong, to say no worse, that a Man may pronounce them not to be divine at first sight; without troubling his head about the System of Providence or Connexion of Events: As one may say that Grass is green, without knowing or considering how it grows, what uses it is subservient to, or how it is connected with the mundane System. Thus for instance, the spoiling of the *Egyptians*, and the extirpation of the *Canaanites*, every one at first glance sees to be cruel and unjust, and may therefore without deliberating pronounce them unworthy of God. CRI. But, *Alciphron*, to judge rightly of these things, may it not be proper to consider how long the *Israelites* had wrought under those severe Task-masters of *Egypt*, what injuries and hardships they had sustained from them, what crimes and abominations the *Canaanites* had been guilty of, what right God hath to dispose of the things of this World, to punish Delinquents, and to appoint both the manner and the instruments of his Justice? Man, who has not such right over his fellow-creatures, who is himself a fellow-sinner with them, who is liable to error as well as passion, whose views are imperfect, who is governed more by Prejudice, than the Truth of things, may not improbably deceive himself, when he sets up for a judge of the proceedings of the holy, omniscient, impassive Creator and Governor of all things.

XVII. *ALC.* Believe me, *Crito*, Men are never so industrious to deceive themselves, as when they engage to defend their Prejudices. You wou'd fain reason us out of all use of our Reason: Can any thing be more irrational? To forbid us to reason on the Divine Dispensations, is to suppose, they will not bear the test of reason; or, in other words, that God acts without reason, which ought not

not to be admitted, no, not in any single instance: For if in one, why not in another? Whoever therefore allows a God, must allow that he always acts reasonably. I will not therefore attribute to him Actions and Proceedings that are unreasonable. He hath given me Reason to judge withal; and I will judge by that unerring Light, lighted from the universal lamp of Nature. *CRI.* O *Alciphron*! as I frankly own the common remark to be true, That when a Man is against Reason, it is a shrewd sign Reason is against him; so I shou'd never go about to dissuade any one, much less one who so well knew the value of it, from using that noble talent. On the contrary, upon all subjects of moment, in my opinion, a Man ought to use his Reason; but then, whether it may not be reasonable to use it with some deference to superior Reason, it will not, perhaps, be amiss to consider. *ALC.* It must surely derogate from the Wisdom of God, to suppose his conduct cannot bear being inspected, not even by the twilight of Humane Reason. *EUPH.* You allow, then, God to be wise? *ALC.* I do. *EUPH.* What! infinitely wise? *ALC.* Even infinitely. *EUPH.* His Wisdom, then, far exceeds that of Man. *ALC.* Vastly. *EUPH.* Probably more than the Wisdom of Man, that of a Child. *ALC.* Without all question. *EUPH.* What think you, *Alciphron*, must not the conduct of a Parent seem very unaccountable to a Child, when its inclinations are thwarted, when it is put to learn the Letters, when it is obliged to swallow bitter Physick, to part with what it likes, and to suffer, and do, and see many things done contrary to its own judgment, however reasonable or agreeable to that of others? *ALC.* This I grant. *EUPH.* Will it not therefore follow from hence by a parity of reason, that the little child, Man, when it takes up-
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on it to judge of the Schemes of Parental Providence, and a thing of yesterday, to criticise the Oeconomy of the Ancient of days? will it not follow, I say, that such a judge, of such matters, must be apt to make very erroneous judgments? esteeming those things in themselves unaccountable, which he cannot account for; and concluding of some certain points, from an appearance of arbitrary carriage towards him, which is suited to his infancy and ignorance, that they are in themselves capricious or absurd, and cannot proceed from a wise, just, and benevolent God. This single consideration, if duly attended to, wou'd, I verily think, put an end to many conceited reasonings against Revealed Religion. *ALC.* You wou'd have us then conclude, that things, to our wisdom unaccountable, may nevertheless proceed from an abyss of Wisdom which our line cannot fathom; and that prospects viewed but in part, and by the broken tinged light of our Intellects, though to us they may seem disproportionate and monstrous, may nevertheless appear quite otherwise to another eye, and in a different situation: In a word, that as Humane Wisdom is but childish Folly, in respect of the divine, so the Wisdom of God may sometimes seem Foolishness to Men.

XVIII. *EUPH.* I wou'd not have you make these conclusions, unless in reason you ought to make them: But if they are reasonable, why shou'd you not make them? *ALC.* Some things may seem reasonable at one time, and not at another: And I take this very apology you make, for Credulity and Superstition, to be one of those things. When I view it in its Principles, it seems naturally to follow from just concessions; but when I consider its consequences, I cannot agree to it. A Man had as good abdicate his Nature, as disclaim the use

use of Reason. A Doctrine is unaccountable, therefore it must be Divine ! *EUPH.* Credulity and Superstition are qualities so disagreeable and degrading to Humane Nature, so surely an effect of weakness, and so frequently a cause of wickedness, that I shou'd be very much surpris'd to find a just course of reasoning lead to them. I can never think that Reason is a blind guide to folly, or that there is any connexion between Truth and Falseness, no more than I can think a thing's being unaccountable a proof that it is Divine : Though at the same time I cannot help acknowledging, it follows from your own avow'd principles, that a thing's being unaccountable, or incomprehensible to our Reason, is no sure argument to conclude it is not Divine ; especially when there are collateral proofs of its being so. A Child is influenced by the many sensible effects it hath felt, of paternal love and care and superior wisdom, to believe and do several things with an implicit faith and obedience ; And if we in the same manner, from the truth and reasonableness which we plainly see in so many points within our cognisance, and the advantages which we experience from the seed of the Gospel sown in good ground, were disposed to an implicit Belief of certain other points, relating to schemes we do not know, or subjects to which our Talents are perhaps disproportionate, I am tempted to think it might become our duty without dishonouring our Reason ; which is never so much dishonoured as when it is foiled, and never in more danger of being foiled, than by judging where it hath neither means nor right to judge. *LYS.* I wou'd give a good deal, to see that ingenious Gamester *Glaucus* have the handling of *Euphranor* one night at our Club. I own he is a peg too high for me in some of his notions : But then

then he is admirable at vindicating Humane Reason against the impositions of Priestcraft.

XIX. *ALC.* He wou'd undertake to make it as clear as day light, that there was nothing worth a straw in Christianity, but what every one knew, or might know, as well without as with it, before as since *Jesus Christ*. *CRI.* That great Man, it seems, teacheth, that common sense alone is the Pole-Star; by which Mankind ought to steer; and that what is called Revelation must be ridiculous, because it is unnecessary and useless, the natural talents of every Man being sufficient, to make him happy, good, and wise, without any further correspondence with Heaven either for light or aid.

EUPH. I have already acknowledged how sensible I am, that my situation in this obscure corner of the Country deprives me of many advantages, to be had from the conversation of ingenious Men in Town. To make my self some amends, I am obliged to converse with the dead and my own Thoughts, which last I know are of little weight against the authority of *Glaucus*, or such like great Men in the Minute Philosophy. But what shall we say to *Socrates*, for he too was of an opinion very different from that ascribed to *Glaucus*?

ALC. For the present we need not insist on authorities, ancient or modern, or inquire which was the greater Man *Socrates* or *Glaucus*. Though, methinks, for so much, as authority can signify, the present times, gray and hoary with age and experience, have a manifest advantage over those that are falsely called *ancient*. But not to dwell on authorities, I tell you in plain *English*, *Euphranor*, we do not want your Revelations; and that for this plain reason, those that are clear every body knew before, and those that are obscure no body is the better for. *EUPH.* Whether it was possible

ſible for Mankind to have known all parts of the Chriſtian Religion, beſides myſteries and poſitive inſtitutions, is not the queſtion between us ; and that they actually did not know them, is too plain to be denied. This, perhaps, was for want of making a due uſe of Reaſon. But, as to the uſefulneſs of Revelation, it ſeems much the ſame thing whether they cou'd not know, or wou'd not be at the pains to know, the Doctrines revealed. And as for thoſe Doctrines which were too obſcure to penetrate, or too ſublime to reach, by natural Reaſon ; how far Mankind may be the better for them is more, I had almoſt ſaid, than even you or *Glaucus* can tell.

XX. *ALC.* But whatever may be pretended as to obſcure Doctrines and Diſpenſations, all this hath nothing to do with Prophecies, which, being altogether relative to Mankind, and the events of this World, to which our faculties are ſurely well enough proportioned, one might expect ſhou'd be very clear, and ſuch as might inform inſtead of puzzling us. *EUPH.* And yet it muſt be allowed that as ſome Prophecies are clear, there are others very obſcure ; but left to my ſelf, I doubt I ſhou'd never have inferred from thence that they were not Divine. In my own way of thinking I ſhou'd have been apt to conclude, that the Prophecies we underſtand are a proof for Inſpiration ; but that thoſe we do not underſtand are no proof againſt it. Inaſmuch as for the latter our ignorance or the reſerve of the Holy Spirit may account, but for the other nothing, for ought that I ſee, can account but Inſpiration. *ALC.* Now I know ſeveral ſagacious Men, who conclude very differently from you, to wit, that the one ſort of Prophecies are nonſenſe, and the other contrived after the events. Behold the difference between a Man of free thought
and

and one of narrow principles ! *EUPH.* It seems then they reject the Revelations because they are obscure, and *Daniel's* Prophecies because they are clear. *ALC.* Either way a Man of sense sees cause to suspect there has been foul play. *EUPH.* Your Men of sense are, it seems, hard to please. *ALC.* Our Philosophers are Men of piercing eyes. *EUPH.* I suppose such Men never make transient judgments from transient views ; but always establish fixed conclusions upon a thorough inspection of things. For my own part, I dare not engage with a Man, who has examined those points so nicely, as it may be presumed you have done : But I cou'd name some eminent writers of our own, now living, whose Books on the subject of Prophecy have given great satisfaction to Gentlemen, who pass for Men of sense and learning, here in the Country. *ALC.* You must know. *Euphranor*, I am not at leisure to peruse the learned Writings of Divines, on a subject which a Man may see through with half an eye. To me it is sufficient, that the point itself is odd and out of the road of nature. For the rest, I leave them to dispute and settle among themselves, where to fix the precise time when the Scepter departed from *Judah* ; or whether in *Daniel's* Prophecy of the *Messiah* we shou'd compute by the *Chaldean* or the *Julian* year. My only conclusion concerning all such matters is, that I will never trouble my self about them. *EUPH.* To an extraordinary genius, who sees things with half an eye, I know not what to say : But for the rest of Mankind, one wou'd think it shou'd be very rash in them to conclude, without much and exact inquiry, on the unsafe side of a question which concerns their chief interest. *ALC.* Mark it well : a true Genius in pursuit of Truth makes swift advances on the wings of General maxims, while little minds creep and grovel amidst mean particularities.

particularities. I lay it down for a certain Truth; that by the fallacious arts of Logic and Criticism, straining and forcing, palliating, patching and distinguishing, a Man may justify or make out any thing; and this remark, with one or two about prejudice, saves me a world of trouble. *EUPH.* You, *Alciphron*, who soar sublime on strong and free pinions, vouchsafe to lend a helping hand to those whom you behold entangled in the birdlime of prejudice. For my part, I find it very possible to suppose Prophecy may be Divine, although there shou'd be some obscurity at this distance, with respect to dates of time or kinds of years. you your self own Revelation possible; and allowing this I can very easily conceive it may be odd, and out of the road of nature. I can without amazement meet in Holy Scripture divers Prophecies, whereof I do not see the completion, divers texts I do not understand, divers mysteries above my comprehension, and ways of God to me unaccountable. Why may not some Prophecies relate to parts of History I am not well enough acquainted with, or to events not yet come to pass? It seems to me that Prophecies unfathomed by the hearer, or even the speaker himself, have been afterward verified and understood in the event; and it is one of my maxims, That, *what hath been may be.* Though I rub my Eyes, and do my utmost to extricate my self from prejudice, yet it still seems very possible to me, that, what I do not, a more acute, more attentive, or more learned Man may understand: At least thus much is plain; the difficulty of some points or passages doth not hinder the clearness of others, and those parts of Scripture, which we cannot interpret, we are not bound to know the sense of. What evil or what inconvenience, if we cannot comprehend what we are not obliged to comprehend, or if we cannot account
for

for those things which it doth not belong to us to account for? Scriptures not understood, at one time, or by one person, may be understood at another time, or by other persons. May we not perceive, by retrospect on what is past, a certain progress from darker to lighter, in the series of the Divine Oeconomy towards Man? And may not future events clear up such points as at present exercise the faith of Believers? Now I cannot help thinking (such is the force either of truth or prejudice) that in all this, there is nothing strained or forced, or which is not reasonable and natural to suppose.

XXI. *ALC.* Well, *Euphranor*, I will lend you a helping hand, since you desire it, but think fit to alter my method: For you must know, the main points of Christian Belief have been infused so early, and inculcated so often, by nurses, pædagogues, and priests, that, be the proofs ever so plain, it is a hard matter to convince a mind, thus tintured and stained, by arguing against revealed Religion from its internal characters. I shall therefore let my self to consider things in another light, and examine your Religion by certain external characters or circumstantial, comparing the system of Revelation with collateral accounts of ancient Heathen writers, and shewing how ill it consists with them. Know then, that the Christian Revelation supposing the *Jewish*, it follows, that if the *Jewish* be destroyed the Christian must of course fall to the Ground. Now, to make short work, I shall attack this *Jewish* Revelation in its head. Tell me, are we not obliged, if we believe the *Mosaic* account of things, to hold the world was created not quite six thousand years ago? *EUPH.* I grant we are. *ALC.* What will you say now, if other ancient records carry up the History of the world

many thousand years beyond this period? What if the *Agyptians* and *Chinese* have accounts extending to thirty or forty thousand years? What if the former of these nations have observed twelve hundred eclipses, during the space of forty eight thousand years, before the time of *Alexander* the great? What if the *Chinese* have also many observations antecedent to the *Jewish* account of the Creation? What if the *Chaldaeans* had been observing the Stars for above four hundred thousand years? And what shall we say if we have Successions of Kings and their Reigns, marked for several thousand years before the beginning of the world, assigned by *Moses*? Shall we reject the accounts and records of all other nations, the most famous, ancient, and learned in the world, and preserve a blind reverence for the Legislator of the *Jews*? *EUPH.* And pray if they deserve to be rejected, why shou'd we not reject them? What if those monstrous Chronologies contain nothing but names without Actions and manifest fables? What if those pretended observations of *Agyptians* and *Chaldaeans* were unknown or unregarded by ancient Astronomers? What if the *Jesuits* have shewn the inconsistency of the like *Chinese* pretensions with the Truth of the *Ephemerides*? What if the most ancient *Chinese* observations allow'd to be authentic, are those of two fixed Stars, one in the winter Solstice, the other in the Vernal Equinox, in the reign of their King *Yao*, which was since the Flood? * *ALC.* You must give me leave to observe, the *Romish* Missionaries are of small credit in this point. *EUPH.* But what knowledge have we, or can we have, of those *Chinese* affairs, but by their means? The same persons that tell us of these accounts refute them; if we reject their authority in one case, what right have we to build upon it in another? *ALC.* When I consider that the

* Bianchini Hist. Univers. c. 17.

Chinese have annals of more than forty thousand years, and that they are a learned ingenious and acute People, very curious, and addicted to Arts and Sciences, I profess I cannot help paying some regard to their accounts of time. *EUPH.* Whatever advantage their situation and political maxims may have given them, it doth not appear they are so learned or so acute in point of Science as the *Europeans*. The general character of the *Chinese*, if we may believe *Trigaltius* and other writers, is that they are men of a trifling and credulous curiosity, addicted to search after the Philosopher's Stone, and a Medicine to make Men immortal, to Astrology, Fortune-telling, and Presages of all kinds. Their ignorance in Nature and Mathematics is evident, from the great hand the *Jesuits* make of that kind of knowledge among them. But what shall we think of those extraordinary annals, if the very *Chinese* themselves give no credit to them for more than three thousand years before *Jesus Christ*? If they do not pretend to have begun to write history above four thousand years ago? And if the oldest books they have now extant in an intelligible character, are not above two thousand years old? One wou'd think a Man of your Sagacity, so apt to suspect every thing out of the common road of nature, shou'd not without the clearest proof admit those annals for authentic, which record such strange things as the Sun's not setting for ten days, and Gold raining three days together. Tell me, *Alciphron*, can you really believe these things without inquiring by what means the tradition was preserved, through what hands it passed, or what reception it met with, or who first committed it to writing? *ALC.* To omit the *Chinese* and their Story, it will serve my purpose as well to build on the authority of *Manetho* that learned *Egyptian* Priest, who had such opportunities of searching

into the most ancient accounts of time, and copying into his Dynasties the most venerable and authentic records inscribed on the pillars of *Hermes*. *EUPH*. Pray, *Alciphron*, where were those chronological pillars to be seen? *ALC*. In the *Serriadical* land. *EUPH*. And where is that country? *ALC*. I don't know. *EUPH*. How were those records preserved for so many ages down to the time of this *Hermes*, who is said to have been the first inventor of letters? *ALC*. I do not know. *EUPH*. Did any other writers, before or since *Manetho*, pretend to have seen, or transcribed, or known any thing about these pillars? *ALC*. Not that I know. *EUPH*. Or about the place where they are said to have been, *ALC*. If they did, it is more than I know. *EUPH*. Do the *Greek* Authors that went into *Ægypt*, and consulted the *Ægyptian* priests, agree with these accounts of *Manetho*? *ALC*. Suppose they do not. *EUPH*. Doth *Diodorus*, who lived since *Manetho*, follow, cite, or so much as mention this same *Manetho*? *ALC*. What will you infer from all this? *EUPH*. If I did not know you and your principles, and how vigilantly you guard against imposture, I shou'd inter that you were a very credulous Man. For what can we call it but credulity to believe most incredible things on most slender authority, such as fragments of an obscure writer, disagreeing with all other Historians, supported by an obscure authority of *Hermes's* pillars, for which you must take his word, and which contain things so improbable as Successions of Gods and Demi-gods, for many thousand years, *Vulcan* alone having reigned nine thousand? There is little in these venerable Dynasties of *Manetho*, besides names and numbers; and yet in that little we meet with very strange things, that wou'd be thought Romantic in another writer:

writer: For instance, the *Nile* overflowing with honey, the Moon grown bigger, a speaking Lamb, seventy Kings who reigned as many days one after another, a King a day *. If you are known *Alciphron*, to give credit to these things, I fear you will lose the honour of being thought incredulous.

ALC. And yet these ridiculous fragments, as you wou'd represent them, have been thought worth the pains and lucubrations of very learned Men. How can you account for the work that the great *Joseph Scaliger* and Sir *John Marsham* make about them? *EUPH.* I do not pretend to account for it. To see *Scaliger* add another *Julian* period to make room for such things as *Manetho's* Dynasties, and Sir *John Marsham* take so much learned pains to piece, patch, and mend those obscure fragments, to range them in Synchronisms, and try to adjust them with sacred Chronology, or make them consistent with themselves and other accounts, is to me very strange and unaccountable. Why they, or *Eusebius*, or yourself, or any other learned Man shou'd imagine those things deserve any regard I leave you to explain.

XXII. *ALC.* After all it is not easy to conceive what shou'd move, not only *Manetho*, but also other *Ægyptian* Priests, long before his time, to set up such great pretences to antiquity, all which however differing from one another, agree in this, that they overthrow the *Mosaic* History? How can this be accounted for without some real foundation? What point of pleasure or profit, or power, cou'd set Men on forging Successions of ancient names, and periods of time for ages before the world began? *EUPH.* Pray, *Alciphron*, is there any thing so strange or singular in this vain humour of extending the antiquity of nations beyond the Truth? Hath it not been observed in most parts

* Scal. Can. Isag. l. 2.

of the world? Doth it not even in our own times shew it self, especially among those dependent and subdued people, who have little else to boast of. To pass over others of our Fellow-subjects, who, in proportion as they are below their neighbours in wealth and power, lay claim to a more remote antiquity; are not the pretensions of *Irish men* in this way known to be very great? If I may trust my Memory O *Flaberty*, in his *Ogygia*, mentions some transactions in *Ireland* before the Flood. The same humour, and from the same cause, appears to have prevailed in *Sicily*, a Country for some Centuries past, subject to the Dominion of Foreigners: During which time, the *Sicilians* have published divers fabulous accounts, concerning the original and antiquity of their cities, wherein they vye with each other. It is pretended to be proved by ancient Inscriptions, whose existence or authority seems on a level with that of *Hermes's* Pillars, that *Palermo* was founded in the days of the Patriarch *Isaac* by a colony of *Hebrews*, *Phœnicians* and *Syrians*, and that a Grandson of *Esau* had been Governor of a tower subsisting within these two hundred years in that city*. The antiquity of *Messina* hath been carried still higher, by some who would have us think it was enlarged by *Nimrod*†. The like pretensions are made by *Catania*, and other Towns of that Island, who have found Authors of as good credit as *Manetho* to support them. Now I shou'd be glad to know why the *Egyptians*, a subdued people, may not probably be supposed to have invented fabulous accounts from the same motive, and like others valued themselves on extravagant pretensions to Antiquity, when in all other respects they were so much inferior to their Masters? That people had been suc-

* Fazelli Hist. Sicul. decad. i. lib. 8.

† Reîna Notizie Istoriche di Messina.

cessively conquered by *Ethiopians*, *Assyrians*, *Babylonians*, *Persians*, and *Grecians*, before it appears that those wonderful Dynasties of *Manetbo* and the Pillars of *Hermes* were ever heard of; as they had been by the two first of those Nations before the time of *Solon* himself, the earliest *Greek* that is known to have consulted the Priests of *Ægypt*: Whose accounts were so extravagant that even the *Greek* Historians, though unacquainted with Holy Scripture, were far from given an intire credit to them. *Herodotus* making a report upon their authority, saith, Those to whom such things seem credible may make the best of them, for himself declaring that it was his purpose to write what he heard*. And both he and *Diodorus* do, on divers occasions, shew the same Diffidence in the narratives of those *Ægyptian* Priests. And as we observed of the *Ægyptians*, it is no less certain that the *Phœnicians*, *Assyrians* and *Chaldeans* were each a conquered and reduced People, before the rest of the world appear to have heard any thing of their pretensions to so remote Antiquity. C.R.I. But what occasion is there to be at any pains to account for the humour of fabulous Writers? Is it not sufficient to see that they relate Absurdities; that they are unsupported by any foreign Evidence; that they do not appear to have been in Credit, even among their own Countrymen, and that they are inconsistent one with another? That Men shou'd have the Vanity to impose on the World by false accounts, is nothing strange; it is much more so, that after what hath been done towards undeceiving the world by so many learned Critics, there shou'd be Men found capable of being abused by those paltry scraps of *Manetbo*, *Berosus*, *Ctesias*, or the like fabulous or Counterfeit

* Herodotus in Euterpe.

Writers. *ALC.* Give me leave to observe, those learned Critics may prove to be Ecclesiastics, perhaps some of them Papists. *CRI.* what do you think of Sir *Isaac Newton*, was he either Papist or Ecclesiastic? Perhaps you may not allow him to have been in Sagacity, or Force of mind, equal to the great Men of the Minute Philosophy: But it cannot be denied that he had read and thought much upon the subject, and that the result of his inquiry was a perfect contempt of all those celebrated Rivals to *Moses*. *ALC.* It hath been observed by Ingenious Men, that Sir *Isaac Newton*, though a Layman, was deeply prejudiced, witness his great regard to the Bible. *CRI.* And the same may be said of Mr. *Locke*, Mr. *Boyle*, Lord *Bacon*, and other famous Laymen, who, however knowing in some points, must nevertheless be allowed not to have attained that keen Discernment, which is the peculiar distinction of your Sect.

XXIII. But perhaps there may be other reasons beside prejudice, to incline a Man to give *Moses* the preference, on the Truth of whose History the Government, Manners, and Religion of his Countrymen were founded and framed; of whose History there are manifest traces in the most ancient books and traditions of the *Gentiles*, particularly of the *Brachmans* and *Persees*; whose history is confirmed by the late Invention of arts and sciences, the gradual Peopling of the world, the very Names of antient nations, and even by the Authority and Arguments of that renowned Philosopher *Lucretius*, who, on other points, is so much admired and followed by those of your Sect. Not to mention that the continual Decrease of fluids, the Sinking of hills, and the Diminution of Planetary motions afford so many Natural Proofs, which shew this world had a beginning; as the

Civil

Civil or Historical proofs abovementioned do plainly point out, this beginning to have been about the time assigned in Holy Scripture. After all which I beg leave to add one Observation more. To any one who considers that, on digging into the earth, such quantities of shells, and, in some places, bones and horns of animals are found, found and intire after having lain there in all probability some thousands of years; it shou'd seem probable, that Gems, Medals, and Implements in metal or stone, might have lasted intire, buried under ground forty or fifty thousand years, if the world had been so old. How comes it then to pass that no remains are found, no antiquities of those numerous ages preceding the Scripture accounts of time; no fragments of buildings, no publick monuments, no intaglias, cammeos, statues, basso relievos, medals, inscriptions, utensils, or artificial works of any kind are ever discover'd, which may bear testimony to the existence of those mighty Empires, those Successions of Monarchs, Heroes, and Demi-gods, for so many thousand years? Let us look forward and suppose ten or twenty thousand years to come, during which time we will suppose, that plagues, famines, wars, and earthquakes shall have made great havock in the world, is it not highly probable that at the end of such a period, Pillars, Vases, and Statues now in being of Granite, or Porphyry, or Jasper, (Stones of such hardness, as we know them to have lasted two thousand years above ground, without any considerable alteration) wou'd bear record of these and past ages? or that some of our current Coins might then be dug up, or old Walls and the foundations of Buildings shew themselves, as well as the shells and stones of the Primæval World are preserved down to our times. To me it seems to follow from these considerations, which common
sense

sense and experience make all men judges of, that we may see good reason to conclude, the world was created about the time recorded in Holy Scripture. And if we admit a thing so extraordinary as the Creation of this World, it shou'd seem that we admit something strange, and odd, and new to Humane Apprehension, beyond any other miracle whatsoever.

XXIV. *Alciphron* sat musing and made no answer, whereupon *Lyficles* expressed himself in the following manner. I must own I shou'd rather suppose with *Lucretius*, that the world was made by chance, and that Men grew out of the earth, like Pumpions, than pin my faith on those wretched fabulous fragments of Oriental History. And as for the learned Men, who have taken pains to illustrate and piece them together, they appear to me no better than so many musty Pedants. An ingenious Free-thinker may perhaps now and then make some use of their Lucubrations, and play one absurdity against another. But you are not therefore to think, he pays any real regard to the authority of such apocryphal Writers, or believes one syllable of the *Chinese*, *Babylonian*, or *Egyptian* Traditions. If we seem to give them a preference before the Bible, it is only because they are not established by Law. This is my plain sense of the matter, and I dare say it is the general sense of our Sect; who are too rational to be in earnest on such trifles, though they sometime give hints of deep Erudition, and put on a grave face to divert themselves with Bigots. *ALC.* Since *Lyficles* will have it so, I am content not to build on accounts of time preceding the *Mosaic*, I must nevertheless beg leave to observe, there is another point of a different nature, against which there do not lie the same exceptions, that deserves to be considered,

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ed, and may serve our purpose as well. I presume it will be allowed that Historians, treating of times within the *Mosaic* account, ought by impartial Men to be placed on the same foot with *Moses*. It may therefore be expected, that those, who pretend to vindicate his Writings, shou'd reconcile them with parallel accounts of other Authors, treating of the same times, things, and persons. And, if we are not attached singly to *Moses*, but take our notions from other Writers, and the probability of things, we shall see good cause to believe, the *Jews* were only a crew of leprous *Aegyptians*, driven from their Country on account of that loathsome Distemper; and that their Religion, pretended to have been delivered from Heaven at mount *Sinai*, was in truth learned in *Egypt*, and brought from thence. *CRI.* Not to insist, on what cannot be denied, that an Historian writing of his own times is to be believed, before others who treat of the same subject several ages after, it seems to me that it is absurd to expect we shou'd reconcile *Moses* with profane Historians, till you have first reconciled them one with another. In answer therefore to what you observe, I desire you wou'd consider in the first place, that *Manetho*, *Chæremón*, and *Lysimachus* had published inconsistent accounts of the *Jews*, and there going forth from *Agypt* *. In the second place, that their Language is a plain proof they were not of *Aegyptian*, but either of *Phœnician*, of *Syrian*, or of *Chaldean*, original: and in the third place, that it doth not seem very probable to suppose, their Religion, the Basis or Fundamental principle of which was the Worship of one only Supreme God, and the principal Design of which was to abolish Idolatry, cou'd be derived from *Agypt*, the most Idolatrous of all nations. It must be owned, the separate situation and

* Joseph. contra Apion. l. 1.

institutions

institutions of the *Jews* occasioned, their being treated by some Foreigners, with great ignorance and contempt of them and their original. But *Strabo*, who is allowed to have been a judicious and inquisitive Writer, though he was not acquainted with their true History, makes more honourable mention of them. He relates that *Moses*, with many other Worshipers of one Infinite God, not approving the Image worship of the *Egyptians* and other nations, went out from *Aegypt* and settled in *Jerusalem*, where they built a Temple to one only God without Images*.

XXV. *ALC.* We who assert the cause of Liberty against Religion, in these later ages of the world, lie under great disadvantages, from the loss of ancient Books, which cleared up many points to the eyes of those great Men, *Celsus*, *Porphry*, and *Julian*, which at a greater distance and with less help cannot so easily be made out by us: but, had we those Records, I doubt not we might demolish the whole System at once. *CRI.* And yet I make some doubt of this; because those great Men, as you call them, with all those advantages cou'd not do it. *ALC.* That must needs have been owing to the Dulness and Stupidity of the world in those days, when the art of reasoning was not so much known and cultivated as of late: But those Men of true genius saw through the deceit themselves, and were very clear in their opinion, which convinces me they had good reason on their side. *CRI.* And yet that great Man *Celsus* seems to have had very slight and inconstant notions: One while, he talks like a thorough *Epicurean*; another, he admits Miracles, Prophecies, and a future state of rewards and punishments. What think you, *Alciphron*, is it not something capricious in so great a Man, among other advantages which he ascribes

* Strab. l. 16.

to Brutes above Humane Kind, to suppose they are Magicians and Prophets; that they have a nearer commerce and union with the Divinity; that they know more than Men; and that Elephants, in particular, are of all others most religious animals and strict observers of an Oath*.

ALC. A great genius will be sometimes whimsical. But what do you say to the Emperor *Julian*, was not he an extraordinary Man? *CRI.* He seems by his writings to have been lively and satirical. Further, I make no difficulty of owning that he was a generous, temperate, gallant, and facetious Emperor: But at the same time it must be allow'd, because his own Heathen Panegyrist *Ammianus Marcellinus*† allows it, that he was a prating, light, vain, superstitious sort of Man. And therefore his Judgment or Authority can be but of small weight with those, who are not prejudiced in his favour. *ALC.* But of all the great Men who wrote against Revealed Religion, the greatest without question was that truly great Man *Porphry*, the loss of whose invaluable work can never be sufficiently lamented. This profound Philosopher went to the bottom and original of things. He most learnedly confuted the Scriptures, shew'd the Absurdity of the *Mosaic* accounts, undermined and exposed the Prophecies, and ridiculed allegorical Interpretations*. The moderns, it must be owned, have done great things and shewn themselves able Men; yet I cannot but regret the loss of what was done by a person of such vast abilities, and who lived so much nearer the Fountain-head; though his authority survives his writings, and must still have its weight with impartial Men, in spite of the enemies of Truth. *CRI.*

* Origen. contra Celsum, l. 4.

† Am. Marcellin. l. 25.

* Luc. Holstenius de vita & scriptis Porphyrii.

Porphry,

Porphyry, I grant was a thorough Infidel, though he appears by no means to have been incredulous. It seems he had a great opinion of Wizards and Necromancers, and believed the Myſteries, Miracles, and Propheſies of *Theurgists* and *Egyptian* priests. He was far from being an enemy to obſcure Jargon; and pretended to extraordinary Extaſies. In a word this great Man appears to have been as unintelligible as a Schoolman, as ſuperſtitious as a Monk, and as fanatical as any Quietiſt or Quaker; and, to compleat his character as a Minute Philoſopher, he was under ſtrong temptations to lay violent hands on himſelf. We may frame a notion of this Patriarch of Infidelity, by his judicious way of thinking upon other points as well as the Chriſtian Religion. So ſagacious was he as to find out, that the Souls of insects, when ſeparated from their bodies, become rational: That Dæmons of a thouſand ſhapes aſſiſt in making Philtrums and Charms, whoſe ſpiritual bodies are nourished and fattened by the Steams of libations and ſacrifices: that the Ghoſts of thoſe, who died violent deaths, uſe to haunt and appear about their Sepulchres. This ſame egregious Philoſopher adviſeth a wiſe Man not to eat fleſh, leſt the impure Soul of the Brute that was put to violent death ſhou'd enter, along with the fleſh, into thoſe who eat it. He adds, as a matter of fact confirmed by many experiments, that thoſe who wou'd inſinuate into themſelves the Souls of ſuch animals, as have the gift of foretelling things to come, need only eat a principal part, the heart for inſtance of a Stag or a Mole, and ſo receive the Soul of the animal, which will propheſy in them like a God*. No wonder if Men whoſe minds were preoccupied by Faith and Tenets of ſuch a peculiar kind ſhou'd be averſe from the reception of the Goſpel.

* Vide Porphyrium de abſtinentia, de ſacrificiis, de diis & demonibus.

Upon the whole, we desire to be excused if we do not pay the same deference to the judgment of men, that appear to us whimsical, superstitious, weak and visionary, which those impartial Gentlemen do, who admire their Talents, and are proud to tread in their Footsteps. *ALC.* Men see things in different views: what one admires another contemns; it is even possible for a prejudiced mind, whose attention is turned towards the Faults and Blemishes of things, to fancy some shadow of defect in those great Lights which in our own days have enlightened, and still continue to enlighten the world.

XXVI. But pray tell me, *Crito*, what you think of *Josephus*? He is allowed to have been a Man of learning and judgment. He was himself an asserter of revealed Religion. And Christians, when his authority serves their turn, are used to cite him with respect. *CRI.* All this I acknowledge. *ALC.* Must it not then seem very strange, and very suspicious to every impartial Inquirer, that this learned *Jew* writing the History of his own Country, of that very place, and those very times, where and when *Jesus Christ* made his appearance, shou'd yet say nothing of the character, miracles, and doctrine of that Extraordinary Person? Some ancient Christians were so sensible of this, that, to make amends, they inserted a famous Passage in that Historian; which imposture hath been sufficiently detected by able Critics in the last age. *CRI.* Though there are not wanting able Critics on the other side of the question, yet, not to enter upon the discussion of that celebrated passage, I am content to give you all you can desire, and suppose it not genuine, but the pious fraud of some wrong-headed Christian, who cou'd not brook the omission in *Josephus*: But this will never make such omission

omission a real objection against Christianity. Nor is there, for ought I can see, any thing in it whereon to ground either admiration or suspicion ; inasmuch as it shou'd seem very natural, supposing the Gospel account exactly true, for *Josephus* to have said nothing of it ; considering that the view of that writer was to give his country some figure in the eye of the World, which had been greatly prejudiced against the *Jews*, and knew little of their history, to which end the Life and Death of our Saviour wou'd not in any wise have conduced ; considering that *Josephus* cou'd not have been an eye-witness of our Saviour or his Miracles ; considering that he was a *Pharisee* of Quality and Learning, foreign as well as *Jewish*, one of great Employment in the State, and that the Gospel was preached to the poor ; that the first Instruments of spreading it, and the first Converts to it were mean and illiterate, that it might not seem the work of Man, or beholding to Humane interest or power ; considering the general prejudice of the *Jews*, who expected in the *Messiah* a temporal and conquering Prince, which prejudice was so strong, that they chose rather to attribute our Saviour's miracles to the Devil, than acknowledge him to be the Christ : Considering also the hellish Disorder and Confusion of the *Jewish* State in the Days of *Josephus*, when Mens minds were filled and astonished with unparallel'd wars, dissensions, massacres, and seditions of that devoted people. Laying all these things together, I do not think it strange, that such a man, writing with such a view, at such a time, and in such circumstances, shou'd omit to describe our Blessed Saviour's life and death, or to mention his miracles, or to take notice of the State of the Christian Church, which was then as a grain of Mustard seed beginning to take Root and germinate. And this will seem still less strange,

if it be considered, that the Apostles in a few years after our Saviour's death departed from *Jerusalem*, setting themselves to convert the *Gentiles*, and were dispersed throughout the world; that the Converts in *Jerusalem* were, not only of the meanest of the people, but also few; the three thousand, added to the Church in one day upon *Peter's* preaching in that city, appearing to have been not Inhabitants but Strangers from all parts assembled to celebrate the feast of *Pentecost*; and that all the time of *Josephus* and for several years after, during a Succession of fifteen Bishops, the Christians at *Jerusalem* observed the *Mosaic Law**, and were consequently, in outward appearance, one people with the rest of the *Jews*, which must have made them less observable. I wou'd fain know what reason we have to suppose, that the Gospel, which in its first Propagation seemed to overlook the great or considerable men of this world, might not also have been overlooked by them, as a thing not suited to their apprehensions and way of thinking? Besides, in those early times might not other learned *Jews*, as well as † *Gamaliel*, suspend their judgment of this new way, as not knowing what to make or say of it, being on one hand unable to quit the Notions and Traditions in which they were brought up, and, on the other, not daring to resist or speak against the Gospel, lest they shou'd be found to fight against God? Surely at all events, it cou'd never be expected, that an unconverted *Jew* shou'd give the same account of the Life, Miracles, and Doctrine of *Jesus Christ*, as might become a Christian to have given; nor on the other hand was it at all improbable, that a Man of sense shou'd beware to lessen or traduce what, for ought

* Sulp. Sever. Sacr. Hist. l 2. & Euseb. Chron. lib. poster.

† Acts v.

he knew, might have been a heavenly Dispensation, between which two courses the middle was to say nothing, but pass it over in a doubtful or a respectful silence. And it is observable, that where this Historian occasionally mentions *Jesus Christ* in his account of St. *James's* death, he doth it without any reflection, or saying either good or bad, though at the same time he shews a regard for the Apostle. It is observable, I say, that speaking of *Jesus* his expression is, who was called the Christ, not who pretended to be the Christ, or who was falsely called the Christ, but simply τὸ λεγόμενον Χριστὸν*. It is evident *Josephus* knew there was such a Man as *Jesus*, and that he was said to be the Christ, and yet he condemns neither him nor his followers; which to me seems an Argument in their favour. Certainly if we suppose *Josephus* to have known or been persuaded that he was an Impostor, it will be difficult to account for his not saying so in plain terms. But if we suppose him in *Gamaliel's* way of thinking, who suspended his judgment, and was afraid of being found to fight against God, it shou'd seem natural for him to behave in that very manner, which according to you makes against our Faith, but I verily think makes for it. But what if *Josephus* had been a Bigot, or even a *Sadducee*, an Infidel, an Atheist? What then! we readily grant there might have been Persons of Rank, Politicians, Generals, and Men of Letters, then as well as now, *Jews* as well as *Englishmen*, who believed no revealed Religion: And that some such persons might possibly have heard of a man in low life, who performed miracles by Magic, without informing themselves, or perhaps ever inquiring, about his Mission and Doctrine. Upon the whole, I cannot comprehend, why any Man shou'd con-

* Jos. Ant. l. 20. c. 8.

clude against the Truth of the Gospel, from *Josephus's* omitting to speak of it, any more than from his omitting to embrace it. Had the first Christians been Chief Priests and Rulers, or Men of science and learning, like *Philo* and *Josephus*, it might perhaps with better colour have been objected, that their Religion was of Humane Contrivance, than now that it hath pleased God by weak things to confound the Strong. This I think sufficiently accounts, why in the beginning the Gospel might overlook or be overlooked by Men of a certain rank and character.

XXVII. *ALC.* And yet it seems an odd argument in proof of any Doctrine, that it was preached by simple people to simple people. *CR I.* Indeed if there was no other attestation to the Truth of the Christian Religion, this must be owned a very weak one. But if a Doctrine begun by instruments, mean as to all Humane Advantages, and making its first progress among those, who had neither wealth nor Art nor power to grace or encourage it, shou'd in a short time by it's own innate Excellency, the mighty force of Miracles, and the demonstration of the Spirit, not only without, but against, all worldly Motives spread through the world, and subdue Men of all ranks and conditions of life, wou'd it not be very unreasonable to reject or suspect it, for the want of humane means? And might not this with much better reason be thought an Argument of its coming from God?

ALC. But still an inquisitive Man will want the Testimony of Men of learning and knowledge. *CR I.* But from the first Century onwards, there was never wanting the testimony of such Men, who wrote learnedly in defence of the Christian Religion, who lived, many of them, when the memory of things was fresh, who had abilities to judge and

means to know, and who gave the clearest proofs of their conviction and sincerity. *ALC.* But all the while these Men were Christians, prejudiced Christians, and therefore their Testimony is to be suspected. *CRI.* It seems then you wou'd have *Jews* or *Heathens* attest the Truths of Christianity. *ALC.* That is the very thing I want. *CRI.* But how can this be ? or if it cou'd, wou'd not any rational Man be apt to suspect such Evidence, and ask, how it was possible for a Man really to believe such things himself and not become a Christian ? the Apostles and first Converts were themselves *Jews*, and brought up in a veneration for the Law of *Moses*, and in all the prejudices of that people : many Fathers, Christian Philosophers, and learned Apologists for the Faith, who had been bred *Gentiles*, were without doubt imbued with prejudices of Education : and if the finger of God and force of Truth converted both the one and the other from *Judaism* or *Gentilism*, in spite of their prejudices to Christianity, is not their Testimony so much the stronger ? You have then the suffrages of both *Jews* and *Gentiles*, attesting to the Truth of our Religion in the earliest ages. But to expect or desire the attestation of *Jews* remaining *Jews*, or of *Gentiles* remaining *Gentiles*, seems unreasonable : nor can it be imagined that the Testimony of Men, who were not converted themselves, shou'd be the likeliest to convert others. We have indeed the Testimony of Heathen Writers to prove, That about the time of our Saviour's birth, there was a general expectation in the east of a *Messiah* or Prince, who shou'd found a new Dominion : That there were such people as Christians : That they were cruelly persecuted and put to death : That they were innocent and holy in life and worship : And that there did really exist in that time, certain persons and facts mentioned in the New Testament :

Testament: And for other points, we have learned Fathers, several of whom had been, as I already observed, bred Heathens, to attest their Truth. *ALC.* For my part I have no great opinion of the capacity or learning of the Fathers, and many learned Men, especially of the reformed Churches abroad, are of the same mind, which saves me the trouble of looking my self into their voluminous Writings. *C.R.L.* I shall not take upon me to say, with the Minute Philosopher *Pomponatius* *, that *Origen*, *Basil*, *Augustin*, and divers other Fathers, were equal to *Plato*, *Aristotle*, and the greatest of the *Gentiles* in Humane Knowledge. But, if I may be allowed to make a judgment from what I have seen of their writings, I shou'd think several of them Men of great parts, eloquence, and learning, and much superior to these who seem to undervalue them. Without any affront to certain modern Critics or Translators, *Erasmus* may be allowed a man of fine taste, and a fit judge of sense and good writing, though his judgment in this point was very different from theirs. Some of our reformed Brethern, because the *Romanists* attribute too much, seem to have attributed too little to them, from a very usual, though no very judicious opposition; which is apt to lead men to remark defects, without making proper allowances, and to say things which neither piety, candour, nor good sense require them to say.

XXVIII. *ALC.* But though I shou'd acknowledge, that a concurring Testimony of many learned and able Men throughout the first ages of Christianity may have its weight, yet when I consider the great number of Forgeries and Heresies that sprung up in those times, it very much weakens

* Lib. de immortalitate animæ.

their credit. *CRI.* Pray, *Alciphron*, wou'd it be allowed a good Argument in the mouth of a Papist against the Reformation, that many absurd Sects sprung up at the same time with it? Are we to wonder, that when good seed is sowing, the enemy shou'd sow tares? But at once to cut off several Objections, let us suppose in fact, what you do not deny possible, that there is a God, a Devil, and a Revelation from Heaven committed to writing many Centuries ago. Do but take a view of Humane Nature, and consider, what wou'd probably follow upon such a supposition; and whether it is not very likely there shou'd be Half-believers, mistaken Bigots, holy Frauds, ambitious, interested, disputing, conceited, schismatical, hæretical, absurd Men among the Professors of such revealed Religion, as well as after a course of ages, various readings, omissions, transpositions, and obscurities in the text of the sacred Oracles? And if so, I leave you to judge, whether it be reasonable to make those events an Objection against the being of a thing, which wou'd probably and naturally follow upon the Supposal of its Being. *ALC.* After all, say what you will, this variety of Opinions must needs shake the faith of a reasonable Man. Where there are so many different Opinions on the same point, it is very certain they cannot all be true, but it is certain they may all be false. And the means to find out the Truth! when a Man of sense sets about this Inquiry, he finds himself on a sudden startled and amused with hard words and knotty questions. This makes him abandon the pursuit, thinking the game not worth the chase. *CRI.* But wou'd not this Man of sense do well to consider, it must argue want of discernment, to reject divine Truths for the sake of Humane Follies? Use but the same candour and impartiality in treating of Religion, that you wou'd think proper

per on other subjects. We desire no more, and expect no less. In Law, in Physic, in Politics, wherever men have refined, is it not evident they have been always apt to run into disputes and chicanery? But will that hinder you from admitting, there are many good rules and just notions, and useful truths in all those professions. Physicians may dispute, perhaps vainly and unintelligibly, about the Animal System: they may assign different causes of Distempers, some explaining them by the elementary qualities, hot and cold, moist and dry, yet this doth not hinder, but the Bark may be good for an Ague, and Rhubarb for a Flux, Nor can it others by chymical, others by mechanical principles, beinferred from the different sects, which from time to time have sprung up in that profession, the Dogmatic, for instance, Empiric, Methodic, Galenic, Paracelsian, or the hard words and knotty questions and idle theories which have grown from them, or been engrafted on them, that, therefore, we shou'd deny the Circulation of the Blood, or reject their excellent rules about Exercise, Air, and Diet. *A L C.* It seems you wou'd screen Religion by the example of other professions, all which have produced Sects and Disputes as well as Christianity, which may in itself be true and useful, notwithstanding many false and fruitless Notions engrafted on it by the wit of Man. Certainly if this had been observed or believed by many acute Reasoners, they wou'd never have made the multiplicity of Religious Opinions and Controversies an Argument against Religion in general. *C R I.* How such an obvious Truth shou'd escape Men of sense and inquiry I leave you to account: But I can very easily account for gross mistakes in those, who pass for Free-thinkers without ever thinking; or, if they do think, whose meditations are employ'd

on other points of a very different nature, from a serious and impartial Inquiry about Religion.

XXIX. But to return : what or where is the profession of Men, who never split into schisms, or never talk nonsense ? Is it not evident, that out of all the kinds of knowledge, on which the Humane mind is employ'd, there grow certain excrescences, which may be pared off, like the clippings of hair or nails in the body, and with no worse consequence. Whatever Bigots or Enthusiasts, whatever notional or scholastic Divines may say or think, it is certain the Faith derived from Christ and his Apostles, was not a piece of empty Sophistry ; they did not deliver and transmit down to us *καὴν ἀπάτην* but *γυμνὴν γνώμην*, to use the expression of a holy Confessor *. And, to pretend to demolish their foundation for the sake of Humane Superstructure, be it hay or stubble or what it will, is no Argument of just thought or reason ; any more than it is of fairness, to suppose a doubtful sense fixed, and argue from one side of the question in disputed points. Whether, for instance, the beginning of *Genesis* is to be understood in a literal or allegorical sense ? Whether the Book of *Job* be an History or a Parable ? Being points disputed between Christians, an Infidel can have no right to argue from one side of the Question, in those or the like cases. This or that Tenet of a Sect, this or that contraverted Notion is not what we contend for at present, but the general Faith taught by Christ and his Apostles, and preserved by universal and perpetual Tradition in all the Churches down to our own times. To tax or strike at this Divine Doctrine, on account of things foreign and adventitious, the speculations and disputes of curious Men, is in my mind an absurdity of the same kind, as it wou'd be to cut down a fine tree yielding Fruit and Shade, because its leaves afforded

* Socr. Hist. Eccles. l. 1.

nourishment

nourishment to Caterpillars, or because Spiders may now and then weave cobwebs among the branches. *ALC.* To divide and distinguish wou'd take time. We have several Gentlemen very capable of judging in the gross, but that want of attention for irksome and dry Studies or minute Inquiries. To which as it would be very hard to oblige Men against their will, so it must be a great wrong to the world, as well as themselves, to debar them from the Right of deciding according to their natural sense of things, *CRI.* It were to be wished those capable Men wou'd employ their judgment and attention on the same objects. If theological Inquiries are unpalatable, the field of nature is wide. How many Discoveries to be made! how many Errors to be corrected in arts and sciences! how many Vices to be reformed in life and manners! Why do men single out such points as are innocent and useful, when there are so many pernicious mistakes to be amended? Why set themselves to destroy the hopes of Humane Kind and encouragements to Virtue? Why delight to judge where they disdain to inquire? Why not employ their noble Talents on the Longitude or Perpetual Motion? *ALC.* I wonder you shou'd not see the difference between points of Curiosity and Religion. Those employ only Men of a genius or humour suited to them; but all Mankind have a right to censure, and are concerned to judge of these, except they will blindly submit to be governed, by the stale wisdom of their Ancestors and the established Laws of their Country. *CRI.* It shou'd seem, if they are concerned to judge, they are not less concerned to examine before they judge. *ALC.* But after all the examination and inquiry that mortal Man can make about Revealed Religion, it is impossible to come at any rational sure footing.

XXX. There

XXX. There is, indeed, a deal of specious talk about Faith founded upon Miracles; but when I examine this matter thoroughly, and trace Christian Faith up to its original, I find it rests upon much darkness and scruple and uncertainty. Instead of points evident or agreeable to Humane Reason, I find a wonderful narrative of the Son of God tempted in the wilderness by the Devil, a thing utterly unaccountable, without any end, or use or reason whatsoever. I meet with strange Histories of Apparitions of Angels and Voices from Heaven, with surprising accounts of Dæmoniacs, things quite out of the road of common Sense or Observation, with several incredible feats said to have been done by Divine Power, but more probably the Inventions of Men; nor the less likely to be so, because I cannot pretend to say with what view they were invented. Designs deeply laid are dark, and the less we know the more we suspect: But, admitting them for true, I shall not allow them to be miraculous, until I thoroughly know the power of what are called second causes and the force of Magic. C R I. You seem, *Alcipkron*, to analyse, not Faith, but Infidelity, and trace it to its Principles; which, from your own account, I collect to be dark and doubtful scruples and surmises, hastiness in judging, and narrowness in thinking, grounded on a fanciful notion which over-rates the little scantling of your own Experience, and on real ignorance of the views of Providence, and of the qualities, operations, and mutual respects of the several kinds of beings, which are, or may be, for ought you know, in the Universe. Thus obscure, uncertain, conceited, and conjectural are the Principles of Infidelity. Whereas on the other hand, the Principles of Faith seem to be points plain and clear. It is a clear point, that this Faith in Christ was spread
abroad

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abroad throughout the world soon after his death. It is a clear point, that this was not effected by humane Learning, Politics, or Power. It is a clear point, that in the early times of the Church there were several men of Knowledge and Integrity, who embraced this Faith not from any, but against all, temporal motives. It is a clear point, that, the nearer they were to the fountain-head, the more opportunity they had to satisfy themselves, as to the Truth of these facts which they believed. It is a clear point, that the less interest there was to persuade, the more need there was of Evidence to convince them. It is a clear point, that they relied on the Authority of those who declared themselves Eye-witnesses of the Miracles and Resurrection of Christ. It is a clear point, that those professed Eye-witnesses suffered much for this their Attestation, and finally sealed it with their Blood. It is a clear point, that these Witnesses, weak and contemptible as they were, overcame the world, spread more light, preached purer morals, and did more benefit to Mankind, than all the Philosophers and Sages put together. These points appear to me clear and sure, and, being allow'd such, they are plain, just, and reasonable motives of assent; they stand upon no fallacious ground, they contain nothing beyond our sphere, neither supposing more knowledge nor other faculties than we are really masters of; and if they shou'd not be admitted for morally certain, as I believe they will by fair and unprejudiced Inquirers, yet the allowing them to be only probable is sufficient to stop the mouth of an Infidel. These plain points, I say, are the Pillars of our Faith, and not those obscure ones by you supposed, which are in truth the unsound, uncertain Principles of Infidelity, to a rash, prejudiced, and assuming Spirit. To raise an Argument, or answer an objection, from hidden powers of Nature
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or Magic is groping in the dark ; but by the evident light of sense men might be sufficiently certified of sensible Effects, and matters of Fact, such as the Miracles and Resurrection of Christ : and the Testimony of such Men may be transmitted to After-ages, with the same moral certainty as other Historical Narrations: and those same miraculous Facts, compared by Reason with the Doctrines they were brought to prove, do afford to an unbiassed mind strong Indications of their coming from God, or a superior Principle, whose Goodness retrieved the Moral World, whose Power commanded the Natural, and whose Providence extended over both. Give me leave to say, that nothing dark, nothing incomprehensible, or mysterious, or unaccountable, is the ground or motive, the principle or foundation, the proof or reason of our Faith, although it may be the object of it. For it must be owned, that, if by clear and sure principles we are rationally led to believe a point less clear, we do not therefore reject such point, because it is mysterious to conceive, or difficult to account for, nor would it be right so to do. As for *Jews* and *Gentiles*, anciently attributing our Saviour's Miracles to Magic, this is so far from being a proof against them, that to me it seems rather a Proof of the Facts, without disproving the Cause to which we ascribe them. As we do not pretend to know the Nature and Operations of *Dæmons*, the History, Laws, and System of rational Beings, and the Schemes or Views of Providence, so far as to account for every action and appearance recorded in the Gospel ; so neither do you know enough of those things, to be able from that Knowledge of yours to object against Accounts so well attested. It is an easy matter to raise Scruples upon many authentic parts of Civil History, which, requiring a more perfect knowledge of Facts, Circumstances, and Councils,

than

than we can come at to explain them, must be to us inexplicable. And this is still more easy with respect to the History of Nature, in which, if Surmises were admitted for Proofs against things odd, strange, and unaccountable, if our scanty Experience were made the rule and measure of Truth, and all those Phænomena rejected, that we, through ignorance of the Principles, and Laws, and System of Nature, cou'd not explain, we shou'd indeed make Discoveries, but it wou'd be only of our own Blindness and Presumption. And why Men that are so easily and so often gravell'd in common Points, in things natural and visible, shou'd yet be so sharp-sighted and dogmatical about the invisible World, and its Mysteries, is to me a point utterly unaccountable by all the Rules of Logic and good Sense. Upon the whole, therefore, I cannot help thinking there are Points sufficiently plain, and clear, and full, whereon a Man may ground a reasonable Faith in Christ: but that the attacks of Minute Philosophers against this faith are grounded upon Darkness, Ignorance, and Presumption. *ALC.* I doubt I shall still remain in the dark as to the Proofs of the Christian Religion, and always presume there is nothing in them.

XXXI. For how is it possible, at this remote distance, to arrive at any Knowledge, or frame any Demonstration about it? *CRI.* What then? Knowledge, I grant, in a strict sense cannot be had without Evidence or Demonstration; but probable Arguments are a sufficient ground of Faith. Who ever supposed that scientific Proofs were necessary to make a Christian? Faith alone is required; and provided that, in the main and upon the whole, Men are persuaded, this saving Faith may consist with some degrees of Obscurity, Scruple, and Error. For although the Light of Truth
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be unchangeable, and the same in its eternal Source, the Father of Lights: Yet, with respect to us, it is variously weakened and obscured, by passing through a long Distance or gross Medium, where it is intercepted; distorted, or tinged by the Prejudices and Passions of Men. But all this notwithstanding, he that will use his Eyes may see enough for the purposes either of Nature, or of Grace; though by a light, dimmer indeed, or clearer, according to the Place, or the Distance, or the Hour, or the Medium. And it will be sufficient, if such Analogy appears between the Dispensations of Grace and Nature, as may make it probable (although much shou'd be unaccountable in both) to suppose them derived from the same Author, and the workmanship of one and the same Hand. *ALC.* Those who saw and touched and handled *Jesus Christ* after his Resurrection, if there were any such, may be said to have seen by a clear Light: But to us the Light is very dim, and, yet it is expected we shou'd believe this Point as well as they. For my part, I believe, with *Spinoza*, that Christ's Death was Literal, but his Resurrection Allegorical*. *CRI.* And for my part, I can see nothing in this celebrated Infidel, that shou'd make me desert matters of Fact, and moral Evidence, to adopt his Notions. Though I must needs own I admit an allegorical Resurrection that proves the real, to wit, a Resurrection of Christ's Disciples from Weakness to Resolution, from Fear to Courage, from Despair to Hope, of which, for ought I can see, no rational Account can be given, but the sensible Evidence that our Lord was truly, really, and literally risen from the dead: But as it cannot be denied that his Disciples, who were Eye-witnesses of his Miracles and Resurrection, had stronger Evidence than we can have of those Points:

* *V. Spinozæ Epist. ad Oldenburgium.*

So it cannot be denied, that such Evidence was then more necessary, to induce Men to embrace a new Institution, contrary to the whole System of their Education, their Prejudices, their Passions, their Interests, and every Humane Motive. Though to me it seems, the moral Evidence and probable Arguments within our reach, are abundantly sufficient to make prudent thinking Men adhere to the Faith, handed down to us from our Ancestors, established by the Laws of our Country, requiring Submission in Points above our Knowledge, and for the rest recommending Doctrines the most agreeable to our Interest and our Reason. And, however strong the Light might have been at the Fountain-head, yet its long Continuance and Propagation, by such unpromising Instruments throughout the World, have been very wonderful. We may now take a more comprehensive View of the Connexion, Order, and Progress of the divine Dispensations, and, by a retrospect on a long Series of past Ages, perceive a Unity of Design running throughout the whole, a gradual disclosing and fulfilling the purposes of Providence, a regular Progress from Types to Antitypes, from things Carnal to things Spiritual, from Earth to Heaven. We may behold Christ crucified, that stumbling-block to the *Jews*, and foolishness to the *Greeks*, putting a final Period to the Temple Worship of the one, and the Idolatry of the other, and that Stone, which was cut out of the Mountain without Hands, and brake in Pieces all other Kingdoms, become it self a great Mountain.

XXXII. If a due Reflection on these things be not sufficient to beget a Reverence for the Christian Faith in the Minds of Men, I shou'd rather impute it to any other Cause, than a wise and cautious Incredulity: When I see their easiness of Faith in the
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common concerns of Life, where there is no Prejudice or Appetite to bias or disturb their natural Judgment: When I see those very Men that in Religion will not stir a step without Evidence, and at every turn expect Demonstration, trust their Health to a Physician, and their Lives to a Sailor with an implicit Faith, I cannot think they deserve the honour of being thought more incredulous than other Men, or that they are more accustomed to know, and for this reason less inclined to believe. On the contrary, one is tempted to suspect, that Ignorance hath a greater share than Science in our modern Infidelity, and that it proceeds more from a wrong Head, or an irregular Will, than from deep Researches. *LYS.* We do not, it must be owned, think that Learning or deep Researches are necessary to pass right Judgments upon things. I sometimes suspect that Learning is apt to produce and justify Whims, and sincerely believe we shou'd do better without it. Our Sect are divided on this Point, but much the greater part think with me. I have heard more than once very observing Men remark, that Learning was the true humane Means which preserved Religion in the World, and that, if we had it in our power to prefer Blockheads in the Church, all wou'd soon be right. *CRI.* Men must be strangely in love with their Opinions, to put out their Eyes rather than part with them. But it has been often remarked, by observing Men that there are no greater Bigots than Infidels. *LYS.* What a Free-thinker and a Bigot, impossible! *CRI.* Not so impossible neither, that an Infidel shou'd be bigoted to his Infidelity. Methinks I see a Bigot, wherever I see a Man over-bearing and positive without knowing why, laying the greatest stress on Points of smallest moment, hasty to judge of the Conscience, Thoughts, and inward Views of other Men

Men, impatient of reasoning against his own Opinions, and choosing them with Inclination rather than Judgment, an Enemy to Learning, and attached to mean Authorities. How far our Modern Infidels agree with this Description, I leave to be considered by those who really consider and think for themselves. *LYS.* We are no Bigots, we are Men that discover Difficulties in Religion, that tie Knots and raise Scruples, which disturb the Repose and interrupt the golden Dreams of Bigots, who therefore cannot endure us. *CRI.* They who cast about for Difficulties, will be sure to find or make them upon every subject: But he that wou'd, upon the foot of Reason, erect himself into a Judge, in order to make a wise Judgment on a Subject of that nature, will not only consider the doubtful and difficult Parts of it, but take a comprehensive View of the whole, consider it in all its Parts and Relations, trace it to its Original, examine its Principles, Effects, and Tendencies, its Proofs internal and external; he will distinguish between the clear Points and the obscure, the certain and the uncertain, the essential and circumstantial, between what is genuine and what foreign: he will consider the different sorts of Proof, that belong to different things, where Evidence is to be expected, where Probability may suffice, and where it is reasonable to suppose there shou'd be Doubts and Scruples: He will proportion his Pains and Exactness to the Importance of the Inquiry, and check that Disposition of his Mind to conclude all those Notions, groundless Prejudices, with which it was imbued before it knew the Reason of them. He will silence his Passions, and listen to Truth: He will endeavour to untie Knots as well as to tie them, and dwell rather on the light parts of things than the obscure: He will balance the force of his Understanding with the difficulty of the

Subject, and to render his Judgment impartial, hear Evidence on all sides, and, so far as he is led by Authority, choose to follow that of the honestest and wisest Men. Now it is my sincere Opinion, the Christian Religion may well stand the Test of such an Inquiry. *LYS.* But such an Inquiry wou'd cost too much Pains and Time. We have thought of another Method, the bringing Religion to the Test of Wit and Humour: This we find a much shorter, easier, and more effectual Way. And as all Enemies are at liberty to choose their Weapons, we make choice of those we are most expert at: And we are the better pleased with this Choice, having observed that of all things a solid Divine hates a Jest. To consider the whole of the Subject, to read and think on all sides, to object plainly, and answer directly, upon the foot of dry Reason and Argument, wou'd be a very tedious and troublesome Affair. Besides it is attacking Pedants at their own Weapons. How much more delicate and artful is it, to give a hint, to cover one's self with an *Ænigma*, to drop a *double Entendre*, to keep it in one's Power to recover, and slip aside, and leave his Antagonist beating the Air? This hath been practised with great Success, and I believe it the top Method to gain Proselytes, and confound Pedants. *CRI.* I have seen several things written in this way, which, I suppose, were copied from the Behaviour of a sly sort of Scorners one may sometimes meet with. Suppose a conceited Man that wou'd pass for witty, tipping the Wink upon one, thrusting out his Tongue at another; one while waggishly smiling, another with a grave Mouth and ludicrous Eyes; often affecting the Countenance of one who smother'd a Jest, and sometimes bursting out in a Horse-laugh: What a Figure wou'd this be, I will not say in the Senate or Council, but in a private Visit among well-

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well-bred Men? And yet this is the Figure that certain great Authors, who in this Age wou'd pass for Models, and do pass for Models, make in their polite and elaborate Writings on the most weighty Points. *ALC.* I who profess my self an Admirer, an Adorer of Reason, am obliged to own, that in some Cases the Sharpness of Ridicule can do more than the Strength of Argument. But if we exert our selves in the use of Mirth and Humour, it is not for want of other Weapons. It shall never be said that a Free-thinker was afraid of Reasoning. No, *Crito*, we have Reasons in store, the best are yet to come; and if we can find an Hour for another Conference before we set out to morrow morning, I'll undertake you shall be plied with Reasons, as clear, and home, and close to the Point as you cou'd wish.





THE SEVENTH DIALOGUE.

- I. *Christian Faith impossible.* II. *Words stand for Ideas.* III. *No Knowledge or Faith without Ideas,* IV. *Grace, no Idea of it.* V. *Abstract Ideas what and how made.* VI. *Abstract general Ideas impossible.* VII. *In what Sense there may be general Ideas.* VIII. *Suggesting Ideas not the only use of Words.* IX. *Force as difficult to form an Idea of as Grace.* X. *Notwithstanding which useful Propositions may be formed concerning it.* XI. *Belief of the Trinity and other Mysteries not absurd.* XII. *Mistakes about Faith an occasion of profane Raillery.* XIII. *Faith its true Nature and Effects.* XIV. *Illustrated by Science.* XV. *By Arithmetic in particular.* XVI. *Sciences conversant about Signs.* XVII. *The true End of Speech, Reason, Science, and Faith.* XVIII. *Metaphysical Objections as strong against Humane Sciences as Articles of Faith.* XIX. *No Religion, because no Humane Liberty.* XX. *Farther Proof against Humane Liberty.* XXI. *Fatalism a Consequence of erroneous Suppositions.* XXII. *Man an accountable Agent.* XXIII. *Inconsistency, Singularity, and Credulity of Minute Philosophers.* XXIV. *Untrodden Paths and new Light of the Minute Philosophers.* XXV. *Sophistry of the Minute Philosophers.* XXVI. *Minute Philosophers ambiguous, enigmatical, unsathomable.* XXVII.

XXVII. *Scepticism of the Minute Philosophers.*

XXVIII. *How a Sceptic ought to behave.* XXIX.

Minute Philosophers why difficult to convince.

XXX. *Thinking not the epidemical Evil of these times.* XXXI. *Infidelity not an Effect of Reason*


or Thought, its true Motives assigned. XXXII.

Variety of Opinions about Religion, Effects there-

of. XXXIII. *Method for proceeding with Mi-*

nute Philosophers. XXXIV. *Want of Thought*

and want of Education Defects of the present Age.

I.  HE Philosophers having resolved to set out for *London* next Morning, we assembled at break of day in the Library. *Alciphron* began with a Declaration of his Sincerity, assuring us he had very maturely and with a most unbiaſſed Mind conſidered all that had been ſaid the day before. He added that upon the whole he cou'd not deny ſeveral probable Reaſons were produced for embracing the Chriſtian Faith. But, ſaid he, thoſe Reaſons being only probable can never prevail againſt abſolute Certainty and Demonſtration. If therefore I can demonſtrate your Religion to be a thing altogether abſurd and inconfiſtent, your probable Arguments in its defence do from that Moment loſe their Force, and with it all Right to be answer'd or conſidered. The concurring Teſtimony of ſincere and able Witneſſes hath without queſtion great weight in humane Affairs. I will even grant that things odd and unaccountable to Humane Judgment or Experience, may ſometimes claim our Aſſent on that ſole Motive. And I will alſo grant it poſſible, for a Tradition to be convey'd with moral Evidence through many Centuries. But at the ſame time you will grant to me, that a thing demonſtrably and palpably falſe is not to be admitted on any Teſtimony whatever, which

at best can never amount to Demonstration. To be plain, no Testimony can make Nonsense Sense; no moral Evidence can make Contradictions consistent. Know then, that as the Strength of our Cause doth not depend upon, so neither is it to be decided by any critical Points of History, Chronology, or Languages. You are not to wonder, if the same sort of Tradition and moral Proof, which governs our Assent with respect to Facts in civil or natural History, is not admitted as a sufficient Voucher for metaphysical Absurdities and absolute Impossibilities. Things obscure and unaccountable in humane Affairs, or the Operations of Nature, may yet be possible, and, if well attested, may be assented unto: But religious Assent or Faith can be evidently shewn in its own nature to be impracticable, impossible, and absurd. This is the primary Motive to Infidelity. This is our Citadel and Fortrefs, which may, indeed, be graced with outworks of various Erudition, but, if those are demolished, remains in it self and of its own proper Strength impregnable. *EUPH.* This, it must be owned, reduceth our Inquiry within a narrow Compass: Do but make out this, and I shall have nothing more to say. *ALC.* Know then, that the shallow Mind of the Vulgar, as it dwells only on the outward Surface of things, and considers them in the gross, may be easily imposed on. Hence a blind Reverence for Religious Faith and Mystery. But when an acute Philosopher comes to dissect and analyse these Points, the Imposture plainly appears: And as he has no Blindness, so he has no Reverence for empty Notions, or, to speak more properly, for meer Forms of Speech, which mean nothing, and are of no use to Mankind.

II. Words are Signs: They do or shou'd stand for Ideas; which so far as they suggest they are significant. But words that suggest no Ideas are insignificant. He who annexeth a clear Idea to every Word he makes use of speaks Sense; but where such Ideas are wanting, the Speaker utters Nonsense. In order therefore to know whether any Man's Speech be senseless and insignificant, we have nothing to do but lay aside the Words and consider the Ideas suggested by them. Men, not being able immediately to communicate their Ideas one to another, are obliged to make use of sensible Signs or Words; the use of which is to raise those Ideas in the Hearer, which are in the Mind of the Speaker: And if they fail of this End they serve to no Purpose. He who really thinks hath a train of Ideas succeeding each other and connected in his Mind: And when he expresseth himself by Discourse, each Word suggests a distinct Idea to the Hearer or Reader; who by that means hath the same train of Ideas in his, which was in the Mind of the Speaker or Writer. As far as this Effect is produced, so far the Discourse is intelligible, hath sense and meaning. Hence it follows, that whoever can be supposed to understand what he reads or hears must have a train of Ideas raised in his Mind, correspondent to the train of Words read or heard. These plain Truths, to which Men readily assent in Theory, are but little attended to in Practice, and therefore deserve to be enlarged on and inculcated however obvious and undeniable. Mankind are generally averse from thinking though apt enough to entertain Discourse either in themselves or others: the Effect whereof is, that their Minds are rather stored with Names than Ideas, the husk of Science rather than the thing. And yet these Words without meaning do often make Distinctions of Parties, the Subject matter of their

Disputes, and the Object of their Zeal. This is the most general Cause of Error, which doth not influence ordinary Minds alone, but even those who pass for acute and learned Philosophers are often employ'd about Names instead of Things or Ideas, and are supposed to know when they only pronounce hard Words without a meaning.

III. Though it is evident that as Knowledge is the Perception of the Connexion or Disagreement between Ideas, he who doth not distinctly perceive the Ideas marked by the terms, so as to form a mental Proposition answering to the verbal, cannot possibly have Knowledge: No more can he be said to have Opinion or Faith which imply a weaker Assent, but still it must be to a Proposition, the Terms of which are understood as clearly, although the Agreement or Disagreement of the Ideas may not be so evident, as in the case of Knowledge. I say, all degrees of Assent whether founded on Reason or Authority, more or less cogent, are internal Acts of the Mind which alike terminate in Ideas as their proper Object: Without which there can be really no such thing as Knowledge, Faith, or Opinion. We may perhaps raise a Dust and Dispute about Tenets purely verbal; but what is this at bottom more than meer trifling? All which will be easily admitted with respect to Humane Learning and Science; wherein it is an allowed Method to expose any Doctrine or Tenet by stripping them of the Words, and examining what Ideas are underneath, or whether any Ideas at all? This is often found the shortest way to end Disputes, which might otherwise grow and multiply without end, the Litigants neither understanding one another nor themselves. It were needless to illustrate what shines by its own Light, and is admitted by all thinking Men. My endeavour shall be

be only to apply it in the present Case. I suppose I need not be at any pains to prove, that the same Rules of Reason and good Sense which obtain in all other Subjects ought to take place in Religion. As for those who consider Faith and Reason as two distinct Provinces, and wou'd have us think good Sense has nothing to do where it is most concerned, I am resolved never to argue with such Men, but leave them in quiet Possession of their Prejudices. And now, for the particular Application of what I have said, I shall not single out any nice disputed Points of School Divinity, or those that relate to the Nature and Essence of God, which being allow'd infinite you might pretend to screen them, under the general Notion of Difficulties attending the Nature of Infinity.

IV. Grace is the main Point in the Christian Dispensation, nothing is oftener mentioned or more considered throughout the New Testament; wherein it is represented as somewhat of a very particular kind, distinct from any thing revealed to the *Jews*, or known by the light of Nature. This same Grace is spoken of as the Gift of God, as coming by *Jesus Christ*, as reigning, as abounding, as operating. Men are said to speak through Grace, to believe through Grace. Mention is made of the Glory of Grace, the Riches of Grace, the Stewards of Grace. Christians are said to be Heirs of Grace, to receive Grace, grow in Grace, be strong in Grace, to stand in Grace, and to fall from Grace. And lastly, Grace is said to justify and to save them. Hence Christianity is styled the Covenant or Dispensation of Grace. And it is well known that no Point hath created more Controversy in the Church than this Doctrine of Grace. What Disputes about its Nature, Extent, and Effects, about universal, efficacious, sufficient, preventing, irresistible

Irresistible Grace have employ'd the Pens of Protestant as well as Popish Divines, of Jansenists and Molinists, of Lutherans, Calvinists, and Arminians, as I have not the least curiosity to know, so I need not say. It sufficeth to observe, that there have been and are still subsisting great contests upon these Points. Only one thing I shou'd desire to be informed of, to wit, what is the clear and distinct Idea marked by the Word Grace? I presume a Man may know the bare meaning of a Term, without going into the depth of all those learned Inquiries. This surely is an easy Matter, provided there is an Idea annexed to such Term. And if there is not, it can be neither the subject of a rational Dispute, nor the Object of real Faith. Men may indeed impose upon themselves or others, and pretend to argue and believe, when at bottom there is no Argument or Belief, farther than meer verbal trifling. Grace taken in the vulgar Sense, either for Beauty, or Favour, I can easily understand. But when it denotes an active, vital, ruling Principle, influencing and operating on the Mind of Man, distinct from every natural Power or Motive, I profess my self altogether unable to understand it, or frame any distinct Idea of it; and therefore I cannot assent to any Proposition concerning it, nor consequently have any Faith about it: And it is a self evident Truth, that God obligeth no Man to Impossibilities. At the request of a Philosophical Friend, I did cast an Eye on the Writings he shew'd me of some Divines, and talked with others on this Subject, but after all I had read or heard cou'd make nothing of it, having always found whenever I laid aside the Word *Grace*, and looked into my own Mind, a perfect vacuity or privation of all Ideas. And, as I am apt to think Mens Minds and Faculties are made much alike, I suspect that other Men, if they examined what they

they call Grace with the same exactness and indifference, wou'd agree with me that there was nothing in it but an empty Name. This is not the only Instance, where a Word often heard and pronounced is believed intelligible, for no other reason but because it is familiar. Of the same kind are many other Points reputed necessary Articles of Faith. That which in the present case imposeth upon Mankind I take to be partly this. Men speak of this holy Principle as of something that acts, moves, and determines, taking their Ideas from corporeal things, from Motion and the Force or *Momentum* of Bodies, which being of an obvious and sensible Nature they substitute in place of a thing spiritual and incomprehensible, which is a manifest Delusion. For though the Idea of corporeal Force be never so clear and intelligible, it will not therefore follow that the Idea of Grace, a thing perfectly incorporeal, must be so too. And though we may reason distinctly, perceive, assent, and form Opinions about the one, it will by no means follow that we can do so of the other. Thus it comes to pass, that a clear sensible Idea of what is real produceth, or rather is made a pretence for, an imaginary spiritual Faith that terminates in no Object; a thing impossible! For there can be no Assent where there are no Ideas: And where there is no Assent there can be no Faith: And what cannot be, that no Man is obliged to. This is as clear as any thing in *Euclid*.

V. The same Method of Reasoning may be applied by any Man of Sense, to confute all other the most essential Articles of the Christian Faith. You are not therefore to wonder that a Man who proceeds on such solid Grounds, such clear and evident Principles, shou'd be deaf to all you can say from moral Evidence, or probable Arguments, which

which are nothing in the balance against Demonstration. *EUPH.* The more Light and Force there is in this Discourse, the more you are to blame for not having produced it sooner. For my part, I shou'd never have said one Word against Evidence. But let me see whether I understand you rightly. You say, every Word in an intelligible Discourse must stand for an Idea; which Ideas as far as they are clearly and distinctly apprehended, so far the Discourse hath meaning, without which it is useless, and insignificant. *ALC.* I do. *EUPH.* For instance, when I hear the Words *Man, Triangle, Colour,* pronounced; they must excite in my Mind distinct Ideas of those things whereof they are Signs, otherwise I cannot be said to understand them. *ALC.* Right. *EUPH.* And this is the only true use of Language. *ALC.* That is what I affirm. *EUPH.* But every time the Word *Man* occurs in Reading or Conversation, I am not conscious that the particular distinct Idea of a Man is excited in my mind. For instance, when I read in *St. Paul's* Epistle to the *Galatians* these Words: *If a Man thinketh himself to be something, when he is nothing, he deceiveth himself.* Methinks I comprehend the Force and Meaning of this Proposition, although I do not frame to my self the particular distinct Idea of a Man. *ALC.* It is very true, you do not form in your Mind the particular Idea of *Peter, James,* or *John,* of a fair or a black, a tall or a low, a fat or a lean, a straight or a crooked, a wise or a foolish, a sleeping or waking Man, but the abstract general Idea of *Man,* prescinding from, and exclusive of all particular Shape, Size, Complexion, Passions, Faculties, and every individual Circumstance. To explain this Matter more fully, you are to understand there is in the Human Mind, a Faculty of contemplating the general Nature of things, separate from all those Particulari-

ties

ties which distinguish the Individuals one from another. For Example, in *Peter*, *James*, and *John*, you may observe in each a certain Collection of Stature, Figure, Colour, and other peculiar Properties by which they are known asunder, distinguished from all other Men, and, if I may so say, individuated. Now leaving out of the Idea of a Man, that which is peculiar to the Individual, and retaining only that which is common to all Men, you form an abstract universal Idea of *Man* or *Humane Nature*, which includes no particular Stature, Shape, Colour, or other quality whether of Mind or Body. After the same manner you may observe particular Triangles to differ one from another, as their sides are equal or unequal, and their Angles greater or lesser; whence they are denominated æquilateral, æquicrural, or scalenum, obtusangular, acutangular, or rectangular. But the Mind excluding out of its Idea, all these peculiar Properties and Distinctions frameth the general abstract Idea of a Triangle; which is neither æquilateral, æquicrural, nor scalenum, neither obtusangular, acutangular, nor rectangular, but all and none of these at once*. The same may be said of the general abstract Idea of Colour, which is something distinct from and exclusive of Blue, Red, Green, Yellow, and every other particular Colour, including only that general Essence in which they all agree. And what has been said of these three general Names, and the abstract general Ideas they stand for may be applied to all others. For you must know, that particular Things or Ideas being infinite, if each were marked or signified by a distinct proper Name, Words must have been innumerable, and Language an endless impossible thing. Hence it comes to pass, that

* See *Locke* on *Humane Understanding*, b. 4. c. 7.

appellative

appellative or general Names stand, immediately and properly, not for particular but for abstract general Ideas, which they never fail to excite in the mind, as oft as they are used to any significant Purpose. And without this, there cou'd be no Communication or Enlargement of Knowledge, no such thing as universal Science or Theorems of any kind. Now for understanding any Proposition or Discourse, it is sufficient that distinct Ideas are thereby raised in your mind, correspondent to those in the Speaker's, whether the Ideas so raised are particular or only abstract and general Ideas. Forasmuch, nevertheless, as these are not so obvious and familiar to vulgar minds, it happens that some Men may think they have no Idea at all, when they have not a particular Idea; but the truth is, you had the abstract general Idea of Man, in the instance assigned, wherein you thought you had none. After the same manner, when it is said, that the three Angles of a Triangle are equal to two right ones; or that Colour is the Object of Sight, it is evident the Words do not stand for this or that Triangle or Colour, but for abstract general Ideas, excluding every thing peculiar to the Individuals, and including only the universal Nature common to the whole kind of Triangles or of Colours.

VI. *EUPH.* Tell me, *Alciphron*, are those abstract general Ideas clear and distinct? *ALC.* They are above all others clear and distinct, being the only proper Object of Science, which is altogether conversant about Universals. *EUPH.* And do you not think it very possible for any Man to know, whether he has this or that clear and distinct Idea or no? *ALC.* Doubtless. To know this he needs only examine his own Thoughts and look into his own mind. *EUPH.* But upon looking

ing into my own mind, I do not find that I have or can have these general abstract Ideas of a Man or a Triangle abovementioned, or of Colour prescind-
 ed from all particular Colours*. Though I shut mine Eyes, and use mine utmost Efforts, and reflect on all that passeth in my own mind, I find it utterly impossible to form such Ideas. *ALC.* To reflect with due Attention and turn the mind inward upon it self, is a difficult Task and not every one's Talent. *EUPH.* Not to insist on what you allowed, that every one might easily know for himself whether he has this or that Idea or no: I am tempted to think no body else can form those Ideas any more than I can. Pray, *Alciphron*, which are those things you wou'd call absolutely impossible? *ALC.* Such as include a Contradiction. *EUPH.* Can you frame an Idea of what includes a Contradiction? *ALC.* I cannot. *EUPH.* Consequently whatever is absolutely impossible you cannot form an Idea of. *ALC.* This I grant. *EUPH.* But can a Colour or Triangle, such as you describe their abstract general Ideas, really exist? *ALC.* It is absolutely impossible such things shou'd exist in Nature. *EUPH.* Shou'd it not follow then that they cannot exist in your mind, or in other words that you cannot conceive or frame an Idea of them? *ALC.* You seem *Euphranor* not to distinguish between pure Intellect and Imagination. Abstract general Ideas I take to be the Object of pure Intellect, which may conceive them although they cannot perhaps be imagined. *EUPH.* I do not perceive that I can by any Faculty, whether of Intellect or Imagination, conceive or frame an Idea of that which is impossible and includes a Contradiction. And I

* See the Introduction to a Treatise concerning the Principles of Humane Knowledge Printed in the year MDCCX. where the absurdity of abstract Ideas is fully considered.

am very much at a loss to account for your admitting that in common Instances, which you wou'd make an Argument against Divine Faith and Mysteries.

VII. *ALC.* There must be some mistake in this. How is it possible there shou'd be general Knowledge without general Propositions, or these without general Names, which cannot be without general Ideas by standing for which they become general?

EUPH. But may not words become general, by being made to stand indiscriminately for all particular Ideas, which from a mutual Resemblance belong to the same kind, without the Intervention of any abstract general Idea? *ALC.* Is there then no such thing as a general Idea? *EUPH.* May we not admit general Ideas, though we shou'd not admit them to be made by abstraction, or though we shou'd not allow of general abstract Ideas? To me it seems, a particular Idea may become general by being used to stand for or represent other Ideas; and that, general Knowledge is conversant about Signs or general Ideas made such by their signification; and which are considered rather in their relative Capacity, and as substituted for others, than in their own Nature, or for their own sake. A Black Line, for Instance, an Inch long, though in it self particular, may yet become Universal, being used as a Sign to stand for any Line whatsoever. *ALC.* It is your Opinion then, that words become general by representing an indefinite Number of particular Ideas. *EUPH.* It seems so to me. *ALC.* Whenever therefore I hear a general Name, it must be supposed to excite some one or other particular Idea of that Species in my mind. *EUPH.* I cannot say so neither. Pray, *Alciphron*, doth it seem to you necessary, that as often as the word Man occurs in Reading or Discourse, you must

must form in your Mind the Idea of a particular Man? *ALC.* I own, it doth not: And not finding particular Ideas always suggested by the Words, I was led to think I had abstract general Ideas suggested by them. And this is the Opinion of all Thinking Men who are agreed, the only use of Words is to suggest Ideas. And indeed what other use can we assign them?

VIII. *EUPH.* Be the use of Words or Names what it will, I can never think it is to do things impossible. Let us then inquire what it is? and see if we can make Sense of our daily Practice. Words it is agreed are Signs: It may not therefore be amiss to examine the use of other Signs in order to know that of Words. Counters, for instance, at a Card-Table are used, not for their own sake, but only as Signs substituted for Money as Words are for Ideas. Say now *Alciphron*, is it necessary every time these Counters are used throughout the whole Progress of a Game, to frame an Idea of the distinct Sum or Value that each represents? *ALC.* by no means: It is sufficient the Players at first agree on their respective Values, and at last substitute those Values in their stead. *EUPH.* And in casting up a Sum, where the Figures stand for Pounds, Shillings, and Pence, do you think it necessary, throughout the whole Progress of the Operation, in each Step to form Ideas of Pounds, Shillings, and Pence? *ALC.* I do not, it will suffice if in the Conclusion those Figures direct our Actions with respect to Things. *EUPH.* From hence it seems to follow that Words may not be insignificant, although they shou'd not, every time they are used, excite the Ideas they signify in our Minds, it being sufficient, that we have it in our power to substitute Things or Ideas for their Signs when there is occasion. It seems also to follow, that

there may be another use of Words, besides that of marking and suggesting distinct Ideas, to wit, the influencing our Conduct and Actions; which may be done either by forming Rules for us to act by, or by raising certain Passions, Dispositions, and Emotions in our Minds. A Discourse, therefore, that directs how to act or excites to the doing or forbearance of an Action may, it seems, be useful and significant, although the Words whereof it is composed shou'd not bring each a distinct Idea into our Minds. *ALC.* It seems so. *EUPH.* Pray tell me, *Alciphron*, is not an Idea altogether inactive? *ALC.* It is. *EUPH.* An Agent therefore, an active Mind, or Spirit cannot be an Idea or like an Idea. Whence it shou'd seem to follow, that those Words which denote an active Principle, Soul, or Spirit do not, in a strict and proper Sense, stand for Ideas: And yet they are not insignificant neither: since I understand what is signified by the term *I*, or *my self*, or know what it means although it be no Idea, nor like an Idea, but that which thinks and wills and apprehends Ideas and operates about them. *ALC.* What wou'd you infer from this? *EUPH.* What hath been inferred already, that Words may be significant although they do not stand for Ideas*. The contrary whereof having been presumed seems to have produced the Doctrine of abstract Ideas. *ALC.* Will you not allow then that the Mind can abstract? *EUPH.* I do not deny it may abstract in a certain sense, inasmuch as those things that can really exist, or be really perceived asunder, may be conceived asunder, or abstracted one from the other; for instance a Man's Head from his Body, Colour from Motion, Figure from Weight. But it will not

* See the Principles of Humane Knowledge. Sect. 135. and the Introduction. Sect. 20.

thence follow, that the Mind can frame abstract general Ideas, which appear to be impossible. *ALC.* And yet it is a current Opinion, that every substantive Name marks out and exhibits to the Mind one distinct Idea separate from all others. *EUPH.* Pray, *Alciphron*, is not the Word *Number* such a substantive Name? *ALC.* It is. *EUPH.* Do but try now whether you can frame an Idea of Number in abstract exclusive of all Signs, Words and Things number'd. I profess, for my own part I cannot. *ALC.* Can it be so hard a matter to form a simple Idea of Number, the Object of a most evident demonstrable Science? Hold, let me see, if I can't abstract the Idea of Number, from the numeral Names and Characters, and all particular numerable things. Upon which *Alciphron* paused a while and then said; to confess the Truth I do not find that I can. *EUPH.* But though, it seems, neither you nor I can form distinct simple Ideas of Number, we can nevertheless make a very proper and significant use of numeral Names. They direct us in the disposition and management of our Affairs, and are of such necessary use, that we shou'd not know how to do without them. And yet, if other Mens Faculties may be judged of by mine, to attain a precise simple abstract Idea of Number, is as difficult as to comprehend any Mystery in Religion.

IX. But to come to your own Instance, let us examine what Idea we can frame of Force abstracted from Body, Motion, and outward sensible Effects. For my self, I do not find that I have or can have any such Idea. *ALC.* Surely every one knows what is meant by Force. *EUPH.* And yet I question whether every one can form a distinct Idea of Force. Let me intreat you, *Alciphron*, be not amused by Terms, lay aside the word *Force*,

and exclude every other thing from your Thoughts, and then see what precise Idea you have of Force. *ALC.* Force is that in Bodies which produceth Motion and other sensible Effects. *EUPH.* It is then something distinct from those Effects. *ALC.* It is. *EUPH.* Be pleased now to exclude the consideration of its Subject and Effects, and contemplate Force it self in its own precise Idea. *ALC.* I profess I find it no such easy matter. *EUPH.* Take your own Advice, and shut your eyes to assist your Meditation. Upon this *Alci-phron* having closed his eyes, and mused a few Minutes, declared he cou'd make nothing of it. And that, replied *Euphranor*, which it seems neither you nor I can frame an Idea of, by your own Remark of Mens Minds and Faculties being made much alike, we may suppose others have no more an Idea of than we. *ALC.* We may. *EUPH.* But, notwithstanding all this, it is certain there are many Speculations, Reasonings, and Disputes, refined Subtilties and nice Distinctions about this same Force. And to explain its Nature, and distinguish the several notions or kinds of it, the Terms *Gravity*, *Reaction*, *vis inertiae*, *vis insita*, *vis impressa*, *vis mortua*, *vis viva*, *impetus*, *momentum*, *solicitatio*, *conatus*, and divers other such like Expressions have been used by learned Men: And no small Controversies have arisen about the Notions or Definitions of these terms. It had puzzled Men to know whether Force is spiritual or corporeal, whether it remains after Action, how it is transferred from one Body to another. Strange Paradoxes have been framed about its Nature, Properties, and Proportions: For instance, that contrary Forces may at once subsist in the same quiescent Body: That the Force of Percussion in a small particle is Infinite: For which and other Curiosities of the same sort, you may consult *Bo-*

rellus

rellus de vi pertuſſionis, the *Lezioni Accademiche* of *Toricelli*, the Exercitations of *Hermanus*, and other Writers. It is well known to the learned World, what a Controverſy hath been carried on between Mathematicians, particularly *Monſieur Leibnitz* and *Monſieur Papin* in the *Leipſic Acta Eruditorum* about the Proportion of Forces, whether they be each to other in a Proportion compounded of the ſimple Proportions of the Bodies and the Celerities, or in one compounded of the ſimple Proportion of the Bodies and the duplicate Proportion of the Celerities? A Point, it ſeems, not yet agreed; As indeed the reality of the thing it ſelf is made a Queſtion. *Leibnitz* diſtinguiſheth between the *niſus elementaris*, and the *impetus*, which is formed by a repetition of the *niſus elementaris*, and ſeems to think they do not exiſt in Nature, but are made only by an abſtraction of the Mind. The ſame Author treating of original, active Force, to illuſtrate his Subject hath recourſe to the ſubſtantial Forms and *Entelecheia* of *Ariſtotle*. And the ingenious *Toricelli* ſaith of Force and Impetus, that they are ſubtile Abſtracts and ſpiritual Quinteſſences; and concerning the *momentum* and the velocity of heavy Bodies falling, he ſaith they are *un certo che*, and *un non ſo che*, that is in plain *Engliſh* he knows not what to make of them. Upon the whole therefore, may we not pronounce, that excluding Body, Time, Space, Motion and all its ſenſible Meaſures and Effects, we ſhall find it as difficult to form an Idea of Force as of Grace? *ALC.* I do not know what to think of it,

X. *EUPH.* And yet, I preſume, you allow there are very evident Propoſitions or Theorems relating to Force, which contain uſeful Truths: for inſtance, that a Body with conjunct Forces deſcribes the Diagonal of a Parallelogram, in the

same time that it wou'd the Sides with separate, Is not this a Principle of very extensive use? Doth not the Doctrine of the Composition and Resolution of Forces depend upon it, and, in consequence thereof, numberless Rules and Theorems directing Men how to act, and explaining *Phænomena* throughout the Mechanics and mathematical Philosophy? And if, by considering this Doctrine of Force, Men arrive at the Knowledge of many Inventions in Mechanics, and are taught to frame Engines, by means of which things difficult and otherwise impossible may be performed, and if the same Doctrine which is so beneficial here below, serveth also as a Key to discover the Nature of the Celestial Motions, shall we deny that it is of use, either in Practice or Speculation, because we have no distinct Idea of Force? Or that which we admit with regard to *Force*, upon what pretence can we deny concerning *Grace*? If there are Queries, Disputes, Perplexities, diversity of Notions and Opinions about the one, so there are about the other also: If we can form no precise distinct Idea of the one, so neither can we of the other, Ought we not therefore by a parity of Reason to conclude, there may be divers true and useful Propositions concerning the one as well as the other? And that Grace may be an Object of our Faith, and influence our Life and Actions, as a Principle destructive of evil habits and productive of good ones, although we cannot attain a distinct Idea of it, separate or abstracted from God the Author, from Man the Subject, and from Virtue and Piety its Effects?

XI. Shall we not admit the same Method of arguing, the same Rules of Logic, Reason, and good Sense to obtain in things Spiritual, and things Corporeal, in Faith and Science, and shall we not use the same Candour, and make the same Allowances,

ances, in examining the Revelations of God and the Inventions of Men? For ought I see, that Philosopher cannot be free from Bias and Prejudice, or be said to weigh things in an equal Ballance who shall maintain the Doctrine of Force and reject that of Grace, who shall admit the abstract Idea of a Triangle, and at the same time ridicule the Holy Trinity. But, however partial or prejudiced other Minute Philosophers might be, you have laid it down for a Maxim, that the same Logic which obtains in other Matters must be admitted in Religion. *LYS.* I think, *Alciphron*, it wou'd be more prudent to abide by the way of Wit and Humour, than thus to try Religion by the dry Test of Reason and Logic. *ALC.* Fear not; By all the Rules of right Reason, it is absolutely impossible that any Mystery, and least of all the Trinity shou'd really be the Object of Man's Faith. *EUPH.* I do not wonder you thought so, as long as you maintained that no Man cou'd assent to a Proposition, without perceiving or framing in his Mind distinct Ideas marked by the Terms of it. But although Terms are Signs, yet having granted that those Signs may be significant, though they shou'd not suggest Ideas represented by them, provided they serve to regulate and influence our Wills, Passions, or Conduct, you have consequently granted, that the Mind of Man may assent to Propositions containing such Terms, when it is so directed or affected by them, notwithstanding it shou'd not perceive distinct Ideas marked by those Terms. Whence it seems to follow, that a Man may believe the Doctrine of the Trinity, if he finds it revealed in Holy Scripture, That the Father, the Son, and the Holy Ghost are God, and that there is but one God? Although he doth not frame in his Mind, any abstract or distinct Ideas of Trinity, Substance, or Personality, provided, that this

Doctrin of a Creator, Redeemer, and Sanctifier makes proper Impressions on his Mind, producing therein, Love, Hope, Gratitude, and Obedience, and thereby becomes a lively operative Principle influencing his Life and Actions, agreeably to that Notion of saving Faith which is required in a Christian. This I say, whether right or wrong, seems to follow from your own Principles and Concessions. But for further satisfaction, it may not be amiss to inquire, whether there be any thing parallel to this Christian Faith in the Minute Philosophy. Suppose, a fine Gentleman or Lady of Fashion, who are too much employ'd to think for themselves, and are only Free-thinkers at second hand, have the advantage of being betimes initiated in the Principles of your Sect, by conversing with Men of Depth and Genius, who have often declared it to be their Opinion, the World is governed either by Fate or by Chance, it matters not which; will you deny it possible for such Persons to yield their Assent to either of these Propositions? *ALC.* I will not. *EUPH.* And may not such their Assent be properly called *Faith*? *ALC.* It may. *EUPH.* And yet it is possible, those Disciples of the Minute Philosophy may not dive so deep, as to be able to frame any abstract, or precise, or any determinate Idea whatsoever, either of Fate or of Chance. *ALC.* This too I grant. *EUPH.* So that according to you, this same Gentleman or Lady may be said to believe or have Faith where they have not Ideas. *ALC.* They may. *EUPH.* And may not this Faith or Persuasion produce real Effects, and shew it self in the Conduct and Tenor of their Lives, freeing them from the Fears of Superstition, and giving them a true Relish of the World, with a noble Indolence or Indifference about what comes after, *ALC.* It may. *EUPH.* And may not Christians, with equal Reason, be

allowed

allowed to believe the Divinity of our Saviour, or that in him God and Man make one Person, and be verily persuaded thereof, so far as for such Faith or Belief to become a real Principle of Life and Conduct, inasmuch as by Virtue of such Persuasion they submit to his Government, believe his Doctrine, and practise his Precepts, although they frame no abstract Idea of the Union between the Divine and Humane Nature; nor may be able to clear up the Notion of Person to the Contentment of a Minute Philosopher. To me it seems evident, that if none but those who had nicely examined, and cou'd themselves explain, the Principle of Individuation in Man, or untie the Knots and answer the Objections, which may be raised even about Humane Personal Identity, wou'd require of us to explain the Divine Mysteries, we shou'd not be often called upon for a clear and distinct Idea of *Person* in relation to the Trinity, nor wou'd the Difficulties on that Head be often objected to our Faith. *ALC.* Methinks, there is no such Mystery in Personal Identity. *EUPH.* Pray in what do you take it to consist? *ALC.* In Consciousness. *EUPH.* Whatever is possible may be supposed. *ALC.* It may. *EUPH.* We will suppose now (which is possible in the Nature of Things, and reported to be fact) that a Person, through some violent Accident or Distemper, shou'd fall into such a total Oblivion, as to lose all Consciousness of his past Life, and former Ideas. I ask, is he not still the same Person? *ALC.* He is the same Man, but not the same Person. Indeed you ought not to suppose that a Person loseth its former Consciousness; for this is impossible, though a Man perhaps may; but then he becomes another Person. In the same Person, it must be owned, some old Ideas may be lost, and some new ones got; but a total Change is inconsistent with Identity of Person. *EUPH.* Let us

us then suppose that a Person hath Ideas, and is conscious during a certain space of Time, which we will divide into three equal Parts, whereof the later Terms are marked by the Letters A, B, C. In the first Part of Time, the Person gets a certain Number of Ideas, which are retained in A: During the second Part of Time, he retains one half of his old Ideas, and loseth the other half, in place of which he acquires as many new ones: So that in B his Ideas are half old and half new. And in the third Part, we suppose him to lose the Remainder of the Ideas acquired in the First, and to get new ones in their stead, which are retained in C, together with those acquired in the second Part of Time. Is this a possible fair Supposition? *ALC.* It is. *EUPH.* Upon these Premises I am tempted to think, one may demonstrate, that Personal Identity doth not consist in Consciousness. *ALC.* As how? *EUPH.* You shall judge; but thus it seems to me. The Persons in A and B are the same, being conscious of common Ideas by supposition. The Person in B is (for the same Reason) one and the same with the Person in C. Therefore the Person in A, is the same with the Person in C, by that undoubted Axiom, *Quæ convenient uni tertio convenient inter se.* But the Person in C hath no Idea in common with the Person in A. Therefore Personal Identity doth not consist in Consciousness. What do you think, *Alciphron*, is not this a plain Inference? *ALC.* I tell you what I think: You will never assist my Faith, by puzzling my Knowledge.

XII. There is, if I mistake not, a practical Faith, or Assent, which sheweth it self in the Will and Actions of a Man, although his Understanding may not be furnished with those abstract, precise, distinct Ideas, which, whatever a Philosopher may

may pretend, are acknowledged to be above the Talents of common Men; among whom, nevertheless, may be found, even according to your own Concession, many Instances of such practical Faith, in other matters which do not concern Religion. What shou'd hinder therefore, but that Doctrines relating to Heavenly Myſteries, might be taught in this ſaving Senſe to vulgar Minds, which you may well think incapable of all Teaching and Faith in the Senſe you ſuppoſe. Which miſtaken Senſe, ſaid *Crito*, has given occaſion to much profane and miſapplied Raillery. But all this may very juſtly be retorted on the Minute Philoſophers themſelves, who confound Scholaſticism with Chriſtianity, and impute to other Men thoſe Perplexities, Chimæras, and inconfiſtent Ideas, which are often the Workmanſhip of their own Brains, and proceed from their own wrong way of Thinking. Who doth not ſee that ſuch an ideal abſtracted Faith is never thought of by the Bulk of Chriſtians, Husbandmen, for Inſtance, Artiſans or Servants? Or what Footſteps are there in the Holy Scripture to make us think, that the wiredrawing of abſtract Ideas was a Task enjoined either Jews or Chriſtians? Is there any thing in the Law or the Prophets, the Evangelists or Apoſtles that looks like it? Every one whoſe Underſtanding is not perverted by Science falſly ſo called, may ſee, the ſaving Faith of Chriſtians is quite of another kind, a vital operative Principle, productive of Charity and Obedience. *ALC.* What are we to think then of the Diſputes and Decisions of the famous Council of *Nice*, and ſo many ſubſequent Councils? What was the Intention of thoſe venerable Fathers the *Homoouſians* and the *Homoiousians*? Why did they diſturb themſelves and the World with hard Words, and ſubtile Controverſies? *CRI.* Whatever their Intention was, it cou'd not be to beget
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nice abstracted Ideas of Mysteries in the Minds of common Christians, this being evidently impossible: Nor doth it appear that the Bulk of Christian Men did in those Days think it any Part of their Duty, to lay aside the Words, shut their Eyes, and frame those abstract Ideas; any more than Men now do of Force, Time, Number, or several other things, about which they nevertheless believe, know, argue and dispute. To me it seems, that, whatever was the Source of these Controversies, and howsoever they were managed, wherein Humane Infirmary must be supposed to have had its Share, the main End was not, on either side, to convey precise positive Ideas to the Minds of Men, by the use of those contested Terms, but rather a negative Sense, tending to exclude Polytheism on the one hand, and Sabellianism on the other*, *ALC.* But what shall we say of so many learned and ingenious Divines, who from time to time have obliged the World with new Explications of Mysteries, who, having themselves professedly laboured to acquire accurate Ideas, wou'd recommend their Discoveries and Speculations to others for Articles of Faith? *CRI.* To all such Innovators in Religion I wou'd say with *Jerome*, “Why after so many Centuries do you pretend to teach us what was untaught before? Why explain what neither *Peter* nor *Paul* thought necessary to be explained? †” And it must be owned, that the Explication of Mysteries in Divinity, allowing the Attempt as fruitless as the Pursuit of the Philosopher's Stone in Chymistry, or the Perpetual Motion in Mechanics, is no more than they, chargeable on the Profession it self, but only on the wrongheaded Professors of it,

* Sozomen. I. 2. c. 8.

† Hieronym. ad Pammachium & Oceanum de erroribus Originis.

XIII. It seems, that what hath been now said may be applied to other Mysteries of our Religion. Original Sin, for Instance, a Man may find it impossible to form an Idea of in abstract, or of the manner of its Transmission, and yet the Belief thereof may produce in his Mind a salutary Sense of his own Unworthiness, and the Goodness of his Redeemer: from whence may follow good Habits, and from them good Actions, the genuine Effects of Faith, which considered in its true Light, is a thing neither repugnant nor incomprehensible, as some Men wou'd persuade us, but suited even to vulgar Capacities, placed in the Will and Affections rather than in the Understanding, and producing holy Lives, rather than subtile Theories. Faith, I say, is not an indolent Perception but an operative Persuasion of Mind, which ever worketh some suitable Action, Disposition or Emotion in those who have it; as it were easy to prove and illustrate by innumerable Instances, taken from Humane Affairs. And, indeed, while the Christian Religion is considered as an Institution fitted to ordinary Minds, rather than to the nicer Talents, whether improved or puzzled, of speculative Men; and our Notions about Faith are accordingly taken from the Commerce of the World, and Practice of Mankind, rather than from the peculiar Systems of Refiners; it will, I think, be no difficult Matter to conceive and justify the Meaning and Use of our Belief of Mysteries, against the most confident Assertions and Objections of the Minute Philosophers, who are easily to be caught in those very Snares, which they have spun and spread for others. And that Humour of Controversy, the Mother and Nurse of Heresies, wou'd doubtless very much abate, if it was considered that things are to be rated, not by the Colour, Shape, or Stamp, so truly

ly as by the Weight. If the Moment of Opinions had been by some litigious Divines made the Measure of their Zeal, it might have spared much Trouble both to themselves and others. Certainly one that takes his Notions of Faith, Opinion, and Assent from Common Sense, and Common Use, and has maturely weighed the Nature of Signs and Language, will not be so apt to controvert the Wording of a Mystery, or to break the Peace of the Church, for the sake of retaining or rejecting a Term.

XIV. *ALC.* It seems, *Euphranor*, and you would persuade me into an Opinion, that there is nothing so singularly absurd as we are apt to think, in the Belief of Mysteries; and that a Man need not renounce his Reason to maintain his Religion. But if this were true, how comes it to pass, that, in proportion as Men abound in Knowledge, they dwindle in Faith? *EUPH.* O *Alciphron*, I have learned from you, that there is nothing like going to the Bottom of things, and analysing them into their first Principles. I shall therefore make an Essay of this Method, for clearing up the Nature of Faith: with what Success, I shall leave you to determine; for I dare not pronounce my self on my own Judgment, whether it be right or wrong: But thus it seems to me. The Objections made to Faith are by no means an Effect of Knowledge, but proceed rather from an Ignorance of what Knowledge is; which Ignorance may possibly be found even in those who pass for Masters of this or that particular Branch of Knowledge. Science and Faith agree in this, that they both imply an Assent of the Mind: And, as the Nature of the First is most clear and evident, it shou'd be first considered in order to cast a Light on the other. To trace things from their Original, it seems that
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the Humane Mind, naturally furnished with the Ideas of things particular and concrete, and being design'd, not for the bare Intuition of Ideas, but for Action or Operation about them, and pursuing her own Happiness therein, stands in need of certain general Rules or Theorems to direct her Operations in this pursuit; the supplying which Want is the true, original, reasonable End of studying the Arts and Sciences. Now these Rules being general, it follows, that they are not to be obtained by the meer Consideration of the original Ideas, or particular Things, but by the means of Marks or Signs, which, being so far forth universal, become the immediate Instruments and Materials of Science. It is not therefore by meer Contemplation of particular Things, and much less of their abstract general Ideas, that the Mind makes her Progress, but by an apposite Choice and skilful Management of Signs: For Instance, Force and Number, taken in concrete with there Adjuncts, Subjects, and Signs, are what every one knows; and considered in abstract, so as making precise Ideas of themselves, they are what no Body can comprehend. That their abstract Nature, therefore, is not the Foundation of Science, is plain: And that barely considering their Ideas in concrete, is not the Method to advance in the respective Sciences, is what every one that reflects may see; nothing being more evident, than that one who can neither write nor read, in common Use understands the meaning of Numeral Words, as well as the best Philosopher or Mathematician.

XV. But here lies the Difference: the one, who understands the Notation of Numbers, by means thereof is able to express briefly and distinctly all the Variety and Degrees of Number, and to perform with ease and dispatch several arithmetical Operations,

perations, by the help of general Rules. Of all which Operations as the Use in Humane Life is very evident, so it is no less evident, that the performing them depends on the aptness of the Notation. If we suppose rude Mankind without the Use of Language, it may be presumed, they wou'd be ignorant of Arithmetic: But the Use of Names, by the Repetition whereof in a certain Order they might express endless Degrees of Number, wou'd be the first Step towards that Science. The next Step wou'd be, to devise proper Marks of a permanent Nature, and visible to the Eye, the Kind and Order whereof must be chose with Judgment, and accommodated to the Names. Which Marking, or Notation, wou'd, in Proportion as it was apt and regular, facilitate the Invention and Application of general Rules, to assist the Mind in reasoning, and judging, in extending, recording, and communicating its Knowledge about Numbers: in which Theory and Operations, the Mind is immediately occupied about the Signs or Notes, by Mediation of which it is directed to act about Things, or Number in concrete (as the Logicians call it) without ever considering the simple, abstract, intellectual, general Idea of Number. I imagine one need not think much to be convinced, that the Science of Arithmetic, in its Rise, Operations, Rules, and Theorems, is altogether conversant about the artificial Use of Signs, Names, and Characters. These Names and Characters are universal, inasmuch as they are Signs. The Names are referred to Things, and the Characters to Names, and both to Operation. The Names being few, and proceeding by a certain Analogy, the Characters will be more useful, the simpler they are, and the more aptly they express this Analogy. Hence the old Notation by Letters was more useful than Words written at length: And the

modern

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modern Notation by Figures, expressing the Progression or Analogy of the Names by their simple Places, is much preferable to that for Ease and Expedition, as the Invention of Algebraical Symbols is to this for extensive and general Use. As Arithmetic and Algebra are Sciences of great Clearness, Certainty, and Extent, which are immediately conversant about Signs, upon the skilful Use and Management whereof they intirely depend, so a little Attention to them may possibly help us to judge of the Progress of the Mind in other Sciences, which, though differing in Nature, Design, and Object, may yet agree in the general Methods of Proof and Inquiry.

XVI. If I mistake not, all Sciences, so far as they are universal and demonstrable by Humane Reason, will be found conversant about Signs as their immediate Object, though these in the Application are referred to Things: the Reason whereof is not difficult to comprehend. For as the Mind is better acquainted with some sort of Objects, which are earlier suggested to it, strike it more sensibly, or are more easily comprehended than others, it is naturally led to substitute those Objects for such as are more subtle, fleeting, or difficult to conceive. Nothing, I say, is more natural, than to make the Things we know, a Step towards those we do not know; and to explain and represent Things less familiar by others which are more so. Now, it is certain we imagine before we reflect, and we perceive by Sense before we imagine; and of all our Senses the Sight is the most clear, distinct, various, agreeable, and comprehensive. Hence it is natural to assist the Intellect by the Imagination, the Imagination by Sense, and the other Senses by Sight. Hence, Figures, Metaphors, and Types. We illustrate spiritual

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Things by corporeal; we substitute Sounds for Thoughts, and written Letters for Sounds; Emblems, Symbols, and Hieroglyphics for Things too obscure to strike, and too various or too fleeting to be retained. We substitute Things imaginable, for Things intelligible, sensible Things for imaginable, smaller Things for those that are too great to comprehend easily, and greater Things for such as are too small to be discerned distinctly, present Things for absent, permanent for perishing, and visible for invisible. Hence the Use of Models and Diagrams. Hence right Lines are substituted for Time, Velocity, and other things of very different Natures. Hence we speak of Spirits in a figurative Style, expressing the Operations of the Mind by Allusions and Terms, borrowed from sensible Things, such as *apprehend, conceive, reflect, discourse*, and such like: And hence those Allegories which illustrate Things intellectual by Visions exhibited to the Fancy. *Plato*, for Instance, represents the Mind presiding in her Vehicle by the Driver of a winged Chariot, which sometimes moults and droops: this Chariot is drawn by two Horses, the one good and of a good Race, the other of a contrary kind, symbolically expressing the Tendency of the Mind towards the Divinity, as she soars or is born aloft by two Instincts like Wings, the one in the Intellect towards Truth, the other in the Will towards Excellence, which Instincts moults or are weakened by sensual Inclinations, expressing also her alternate Elevations and Depressions, the Struggles between Reason and Appetite, like Horses that go an unequal Pace, or draw different Ways, embarrassing the Soul in her Progress to Perfection. I am inclined to think the Doctrine of Signs a Point of great Importance, and general Extent, which, if duly considered, wou'd
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cast no small light upon Things, and afford a just and genuine Solution of many Difficulties.

XVII. Thus much, upon the whole, may be said of all Signs: That they do not always suggest Ideas signified to the Mind, That when they suggest Ideas, they are not general abstract Ideas: That they have other Uses besides barely standing for and exhibiting Ideas, such as raising proper Emotions, producing certain Dispositions or Habits of Mind, and directing our Actions in pursuit of that Happiness, which is the ultimate End and Design, the Primary Spring and Motive, that sets rational Agents at work: That the true End of Speech, Reason, Science, Faith, Assent in all its different Degrees, is not meerly, or principally, or always the imparting or acquiring of Ideas, but rather something of an active, operative Nature, tending to a conceived Good, which may sometimes be obtained, not only although the Ideas marked are not offered to the Mind, but even although there shou'd be no possibility of offering or exhibiting any such Idea to the Mind: For Instance, the Algebraic Mark, which denotes the Root of a negative Square, hath its Use in Logistic Operations, although it be impossible to form an Idea of any such Quantity. And what is true of Algebraic Signs, is also true of Words or Language, modern Algebra being in fact a more short, apposite, and artificial Sort of Language, and it being possible to express by Words at length, though less conveniently, all the Steps of an Algebraical Process. And it must be confessed, that even the Mathematical Sciences themselves, which above all others are reckoned the most clear and certain, if they are considered, not as Instruments to direct our Practice, but as Speculations to employ our Curiosity, will be found to fall short in

many Instances of those clear and distinct Ideas, which, it seems, the Minute Philosophers of this Age, whether knowingly or ignorantly, expect and insist upon in the Mysteries of Religion.

XVIII. Be the Science or Subject what it will, whensoever Men quit Particulars for Generalities, things Concrete for Abstractions, when they forsake practical Views, and the useful Purposes of Knowledge for barren Speculation, considering Means and Instruments as ultimate Ends, and labouring to attain precise Ideas which they suppose indiscriminately annexed to all Terms, they will be sure to embarrass themselves with Difficulties and Disputes. Such are those which have sprung up in Geometry about the Nature of the Angle of Contact, the Doctrine of Proportions, of Indivisibles Infinitesimals, and divers other Points; notwithstanding all which, that Science is very rightly esteemed an excellent and useful one, and is really found to be so in many Occasions of Humane Life, wherein it governs and directs the Actions of Men, so that by the Aid or Influence thereof those Operations become just and accurate, which wou'd otherwise be faulty and uncertain. And from a parity of Reason, we shou'd not conclude any other Doctrines which govern, influence or direct the Mind of Man to be, any more than that, the less true or excellent, because they afford matter of Controversy and useless Speculation to curious and licentious Wits: Particularly those Articles of our Christian Faith, which, in proportion as they are believed, persuade, and, as they persuade, influence the Lives and Actions of Men. As to the perplexity of Contradictions and abstracted Notions, in all parts whether of Humane Science or Divine Faith, Cavillers may equally object, and unwary Persons incur, while the judicious avoid it.

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There is no need to depart from the received Rules of Reasoning to justify the Belief of Christians. And if any pious Men think otherwise, it may be supposed an Effect, not of Religion, or of Reason, but only of Humane Weakness. If this Age be singularly productive of Infidels, I shall not therefore conclude it to be more knowing, but only more presuming, than former Ages: And their Conceit, I doubt, is not the Effect of Consideration. To me it seems, that the more thoroughly and extensively any Man shall consider and scan the Principles, Objects, and Methods of proceeding in Arts and Sciences, the more he will be convinced, there is no weight in those plausible Objections that are made against the Mysteries of Faith, which it will be no difficult matter for him to maintain or justify in the received Method of arguing, on the common Principles of Logic, and by numberless avow'd parallel Cases, throughout the several Branches of Humane Knowledge, in all which the Supposition of abstract Ideas creates the same Difficulties.

XIX. *ALC.* I will allow, *Euphranor*, this Reasoning of yours to have all the Force you meant it shou'd have. I freely own there may be Mysteries: That we may believe, where we do not understand: And that Faith may be of use although its Object is not distinctly apprehended. In a word, I grant their may be Faith and Mysteries in other Things but not in Religion: And that for this plain Reason: Because it is absurd to suppose, there shou'd be any such thing as Religion; and if there be no Religion it follows there cannot be Religious Faith or Mysteries. Religion, it is evident, implies the Worship of a God; which Worship supposeth Rewards and Punishments, which suppose Merits and Demerits, Actions good

and evil, and these suppose Humane Liberty, a thing impossible; and consequently Religion a thing built thereon must be an unreasonable absurd thing. There can be no rational Hopes or Fears where there is no Guilt, nor any Guilt where there is nothing done, but what unavoidably follows from the Structure of the World and the Laws of Motion. Corporeal Objects strike on the Organs of Sense, whence ensues a Vibration in the Nerves, which, being communicated to the Soul or Animal Spirit in the Brain or Root of the Nerves, produceth therein that Motion called Volition: And this produceth a new Determination in the Spirits, causing them to flow into such Nerves as must necessarily by the Laws of Mechanism produce such certain Actions. This being the Case, it follows that those things which vulgarly pass for Humane Actions are to be esteemed Mechanical, and that they are falsely ascribed to a free Principle. There is therefore no Foundation for Praise or Blame, Fear or Hope, Reward or Punishment, nor consequently for Religion, which, as I observed before, is built upon and supposeth those things. *EUPH.* You imagine, *Alciphron*, if I rightly understand you, that Man is a sort of Organ played on by outward Objects, which according to the different shape and texture of the Nerves produce different Motions and Effects therein. *ALC.* Man may, indeed, be fitly compared to an Organ; but a Puppet is the very Thing. You must know, that certain Particles issuing forth in right Lines from all sensible Objects compose so many Rays, or Filaments, which drive, draw, and actuate every part of the Soul and Body of Man, just as Threads or Wires do the joints of that little wooden Machine vulgarly called a *Puppet*: With this only difference that the latter are gross and visible to common eyes, whereas the former are too fine and subtile to be discerned

discerned by any but a sagacious Free-thinker. This admirably accounts for all those Operations, which we have been taught to ascribe to a thinking Principle within us. *EUPH.* This is an ingenious Thought, and must be of great use in freeing Men from all Anxiety about Moral Notions, as it transfers the Principle of Action from the Humane Soul to things outward and foreign. But I have my Scruples about it. For you suppose the Mind in a literal sense to be moved and its Volitions to be meer Motions. Now if another shou'd affirm, as it is not impossible some or other may, that the Soul is incorporeal, and that Motion is one thing and Volition another, I wou'd fain know how you cou'd make your Point clear to such a one. It must be owned very clear to those who admit the Soul to be corporeal, and all her Acts to be but so many Motions. Upon this Supposition, indeed, the Light wherein you place Humane Nature is no less true, than it is fine and new. But let any one deny this Supposition, which is easily done, and the whole Superstructure falls to the ground. If we grant the abovementiond Points, I will not deny a fatal Necessity must ensue. But I see no reason for granting them. On the contrary it seems plain, that Motion and Thought are two Things as really and as manifestly distinct as a Triangle and a Sound. It seems therefore, that in order to prove the necessity of Humane Actions, you suppose what wants Proof as much as the very Point to be proved.

XX. *ALC.* But supposing the Mind incorporeal, I shall, nevertheless, be able to prove my Point. Not to amuse you with far fetched Arguments, I shall only desire you to look into your own Breast and observe how things pass there, when an Object offers it self to the Mind. First the Un-

derstanding considers it: In the next Place the Judgment decrees about it, as a thing to be chosen or rejected, to be omitted or done, in this or that manner: And this Decree of the Judgment doth necessarily determine the Will, whose Office is meerly to execute what is ordained by another Faculty: Consequently there is no such thing as Freedom of the Will: For that which is necessary cannot be free. In Freedom there shou'd be an Indifference to either side of the Question, a Power to act or not to act, without prescription or controul: And without this Indifference and this Power, it is evident the Will cannot be free. But it is no less evident, that the Will is not indifferent in its Actions, being absolutely determined and governed by the Judgment. Now whatever moves the Judgment, whether the greatest present Uncasiness, or the greatest apparent Good, or whatever else it be, it is all one to the Point in hand. The Will being ever concluded and controlled by the Judgment is in all Cases alike under Necessity. There is, indeed, throughout the whole of Humane Nature, nothing like a Principle of Freedom, every Faculty being determined in all its Acts by something foreign to it. The Understanding, for Instance, cannot alter its Idea, but must necessarily see it such as it presents it self. The Appetites by a natural Necessity are carried towards their respective Objects. Reason cannot infer indifferently any thing from any thing, but is limited by the Nature and Connexion of things, and the eternal Rules of Reasoning. And as this is confessedly the Case of all other Faculties, so it equally holds with respect to the Will it self, as hath been already shewn. And if we may credit the Divine Characterizer of our Times, this above all others must be allowed the most slavish Faculty.

“ Appetite (saith that noble Writer) which is el-

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“ der Brother to Reason, being the Lad of strong-
“ er growth, is sure on every contest to take the
“ Advantage of drawing all to his own side: And
“ Will, so highly boasted, is but at best a Foot-
“ ball or Top between those Youngsters who
“ prove very unfortunately matched, till the
“ youngest, instead of now and then a kick or lash
“ bestow’d to little purpose, forsakes the Ball or
“ Top it self, and begins to lay about his elder
“ Brother”. *CRI.* This beautiful Parable for
Style and Manner might equal those of a known
English Writer, in low Life renowned for Allego-
ry, were it not a little incorrect, making the weak-
er Lad find his account in laying about the strong-
er. *ALC.* This is helped by supposing the stronger
Lad the greater Coward: But, be that as it will,
so far as it relates to the Point in hand, this is a
clear state of the Case. The same Point may be
also proved from the Prescience of God. That
which is certainly foreknown will certainly be.
And what is certain is necessary. And necessa-
ry Actions cannot be the Effect of Free-will. Thus
you have this fundamental Point of our Free-
thinking Philosophy demonstrated different ways.
EUPH. Tell me, *Alciphron*, do you think it im-
plies a Contradiction, that God shou’d make a
Man Free? *ALC.* I do not. *EUPH.* It is then
possible there may be such a thing. *ALC.* This I
do not deny. *EUPH.* You can therefore con-
ceive and suppose such a Free Agent. *ALC.* Ad-
mitting that I can; what then? *EUPH.* Wou’d
not such an one think that he acted? *ALC.* He
wou’d. *EUPH.* And condemn himself for some
Actions and approve himself for others? *ALC.*
This too I grant. *EUPH.* Wou’d he not think
he deserved Reward or Punishment? *ALC.* He
wou’d. *EUPH.* And are not all these Characters
actually found in Man? *ALC.* They are. *EUPH.*
Tell

Tell me now, what other Character of your supposed Free Agent may not actually be found in Man? For if there is none such, we must conclude that Man hath all the marks of a Free Agent. *ALC.* Let me see! I was certainly overseen in granting it possible, even for Almighty Power, to make such a thing as a Free Humane Agent. I wonder how I came to make such an absurd Concession, after what had been, as I observed before, demonstrated so many different ways. *EUPH.* O *Alciphron*, it is vulgarly observed that Men judge of others by themselves. But in judging of me by this Rule, you may be mistaken. Many things are plain to one of your Sagacity, which are not so to me, who am often bewildered rather than enlightened by those very Proofs, that with you pass for clear and evident. And, indeed, be the Inference never so just, yet so long as the Premises are not clear, I cannot be thoroughly convinced. You must give me leave therefore to propose some Questions, the Solution of which may perhaps shew what at present I am not able to discern. *ALC.* I shall leave what hath been said with you, to consider and ruminate upon. It is now time to set out on our Journey; there is, therefore, no room for a long String of Question and Answer.

XXI. *EUPH.* I shall then only beg leave in a summary Manner, to make a Remark or two on what you have advanced. In the first place I observe, you take that for granted which I cannot grant, when you assert whatever is certain the same to be necessary. To me, Certain and Necessary seem very different; there being nothing in the former notion that implies Constraint, nor consequently which may not consist with a Man's being accountable for his Actions. If it is foreseen that such an Action shall be done: May it not also be fore-

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foreseen that it shall be an Effect of Humane Choice and Liberty? In the next place I observe, that you very nicely abstract and distinguish the Actions of the Mind, Judgment, and Will: That you make use of such Terms as Power, Faculty, Act, Determination, Indifference, Freedom, Necessity, and the like, as if they stood for distinct abstract Ideas: And that this Supposition seems to ensnare the Mind into the same Perplexities and Errors, which, in all other Instances, are observed to attend the Doctrine of Abstraction. It is self evident, that there is such a thing as Motion; and yet there have been found Philosophers, who, by refined Reasoning, wou'd undertake to prove there was no such thing. Walking before them was thought the proper Way to confute those ingenious Men. It is no less evident, that Man is a free Agent: and though by abstracted Reasonings you shou'd puzzle me, and seem to prove the contrary, yet so long as I am conscious of my own Actions, this inward Evidence of plain Fact will bear me up against all your Reasonings, however subtile and refined. The confuting plain Points by obscure ones, may perhaps convince me of the Ability of your Philosophers, but never of their Tenets. I cannot conceive why the acute *Cratylus* shou'd suppose a Power of Acting in the Appetite and Reason, and none at all in the Will? Allowing, I say, the Distinction of three such Beings in the Mind, I do not see how this cou'd be true. But if I cannot abstract and distinguish so many Beings in the Soul of Man so accurately as you do, I do not find it necessary, since it is evident to me in the gross and concrete that I am a free Agent. Nor will it avail to say, the Will is governed by the Judgment, or determined by the Object, while, in every sudden common Case, I cannot discern nor abstract the Decree of the Judgment from the Command of the Will;

Will; while I know the sensible Object to be absolutely inert: And, lastly, while I am conscious that I am an active Being, who can and do determine my self. If I shou'd suppose things spiritual to be corporeal, or refine things actual and real into general abstracted Notions, or by metaphysical Skill split things simple and individual into manifold Parts, I do not know what may follow: But if I take things as they are, and ask any plain untutored Man, whether he acts or is free in this or that particular Action, he readily assents, and I as readily believe him from what I find within. And thus, by an Induction of Particulars, I may conclude Man to be a free Agent, although I may be puzzled to define or conceive a Notion of Freedom in general and abstract. And if Man be free he is plainly accountable. But if you shall define, abstract, suppose, and it shall follow that according to your Definitions, Abstractions, and Suppositions, there can be no Freedom in Man, and you shall thence infer that he is not accountable, I shall make bold to depart from your metaphysical abstracted Sense, and appeal to the common Sense of Mankind.

XXII. If we consider the Notions that obtain in the World of Guilt and Merit, Praise and Blame, Accountable and Unaccountable, we shall find the common Question in order to applaud or censure, acquit or condemn a Man, is, whether he did such an Action? and whether he was himself when he did it? which comes to the same thing. It shou'd seem therefore that in the ordinary Commerce of Mankind, any Person is esteemed accountable simply as he is an Agent. And though you shou'd tell me that Man is inactive, and that the sensible Objects act upon him, yet my own Experience assures me of the contrary. I know I act, and what I
act

act I am accountable for. And if this be true, the Foundation of Religion and Morality remains unshaken. Religion, I say is concerned no farther than that Man shou'd be Accountable: And this he is according to my Sense, and the common Sense of the World, if he acts; and that he doth act is self evident. The Grounds, therefore, and Ends of Religion are secured; whether your philosophic Notion of Liberty agrees with Man's Actions or no, and whether his Actions are certain or contingent, the Question being not whether he did it with a Free Will, or what determined his Will? not, whether it was certain or foreknown that he wou'd do it? but only whether he did it wilfully? as what must entitle him to the Guilt or Merit of it. *ALC.* But still, the Question recurs, whether Man bee Free? *EUPH.* To determine this Question, ought we not first to determine what is meant by the word *Free*? *ALC.* We ought. *EUPH.* In my Opinion, a Man is said to be Free, so far forth as he can do what he will. Is this so or is it not? *ALC.* It seems so. *EUPH.* Man therefore acting according to his Will, is to be accounted Free. *ALC.* This I admit to be true in the Vulgar Sense. But a Philosopher goes higher, and inquires whether Man be free to will? *EUPH.* That is, whether he can will as he wills? I know not how Philosophical it may be to ask this Question, but it seems very unintelligible. The Notions of Guilt and Merit, Justice and Reward are in the Minds of Men, antecedent to all Metaphysical Disquisitions: And according to those received natural Notions, it is not doubted that Man is accountable, that he acts, and is self-determined.

XXIII. But a Minute Philosopher shall, in virtue of wrong Suppositions, confound things most evidently distinct; Body, for Instance, with Spirit, Motion with Volition, Certainty with Necessity; and an Abstracter or Refiner shall so analyse the most simple instantaneous Act of the Mind, as to distinguish therein divers Faculties and Tendencies, Principles and Operations, Causes and Effects; and having abstracted, supposed, and reasoned upon Principles gratuitous and obscure, such a one he will conclude it is no Act at all, and Man no Agent but a Puppet, or an Organ play'd on by outward Objects, and his Will a Top or a Football. And this passeth for Philosophy and Free-thinking. Perhaps this may be what it passeth for, but it by no means seems a natural or just way of Thinking. To me it seems, that if we begin from things particular and concrete, and thence proceed to general Notions and Conclusions, there will be no Difficulty in this Matter. But if we begin with Generalities, and lay our Foundation in abstract Ideas, we shall find our selves entangled and lost in a Labyrinth of our own making. I need not observe, what every one must see, the ridicule of proving Man no Agent, and yet pleading for free Thought and Action, of setting up at once for Advocates of Liberty and Necessity. I have hastily thrown together these Hints or Remarks, on what you call a fundamental Article of the Minute Philosophy, and your Method of proving it, which seems to furnish an admirable Specimen of the Sophistry of abstract Ideas. If in this summary way I have been more dogmatical than became me, you must excuse what you occasioned, by declining a joint and leisurely Examination of the Truth.

ALC. I think we have examined Matters sufficiently. *CR I.* To all you have said against Humane Liberty,

Liberty, it is a sufficient Answer to observe that your Arguments proceed upon an erroneous Supposition, either of the Soul's being corporeal, or of abstract Ideas. And on the other hand, there is not need of much Inquiry to be convinced of two Points, than which none are more evident, more obvious, and more universally admitted by Men of all sorts, learned or unlearned, in all Times and Places, to wit, that Man acts and is accountable for his Actions. Whatever Abstracters, Refiners, or Men prejudiced to a false Hypothesis may pretend, it is, if I mistake not, evident to every thinking Man of common Sense, that Humane Minds are so far from being Engines or Foot-balls, acted upon and bandied about by corporeal Objects, without any inward Principle of Freedom or Action, that the only original true Notions that we have of Freedom, Agent, or Action, are obtained by reflecting on our selves, and the Operations of our own Minds. The Singularity and Credulity of Minute Philosophers, who suffer themselves to be abused by the Paralogisms of three or four eminent Patriarchs of Infidelity in the last Age, is, I think, not to be matched; there being no Instance of bigotted Superstition, the Ringleaders whereof have been able to seduce their Followers more openly and more widely from the plain Dictates of Nature and common Sense.

XXIV. *ALC.* It has been always an Objection against the Discoverers of Truth, that they depart from received Opinions. The Character of Singularity is a Tax on Free-thinking: And as such we most willingly bear it, and glory in it. A Genuine Philosopher is never modest in a false Sense, to the preferring Authority before Reason, or an old and common Opinion before a true one. Which false Modesty, as it discourages Men from treading in untrodden

untrodden Paths, or striking out new Light, is above all other Qualities the greatest Enemy to Free-thinking. *CR I.* Authority in disputable Points will have its Weight with a judicious Mind, which yet will follow Evidence wherever it leads. Without preferring we may allow it a good Second to Reason. Your Gentlemen, therefore, of the Minute Philosophy, may spare a World of Common Place upon Reason, and Light, and Discoveries. We are not attached to Authority against Reason, nor afraid of untrodden Paths that lead to Truth, and are ready to follow a new Light when we are sure it is no *ignis fatuus*. Reason may oblige a Man to believe against his Inclinations; but why shou'd a Man quit salutary Notions for others not less unreasonable than pernicious? Your Schemes and Principles, and boasted Demonstrations have been at large proposed and examined. You have shifted your Notions, successively retreated from one Scheme to another, and in the End renounced them all. Your Objections have been treated in the same Manner, and with the same Event. If we except all that relates to the particular Errors and Faults of private Persons, and Difficulties which, from the Nature of Things, we are not obliged to explain, it is surprising to see, after such magnificent Threats, how little remains, that can amount to a pertinent Objection against the Christian Religion. What you have produced has been tried by the fair Test of Reason; and though you shou'd hope to prevail by Ridicule when you cannot by Reason, yet in the upshot, I apprehend you will find it impracticable to destroy all Sense of Religion. Make your Countrymen ever so vicious, ignorant, and profane, Men will still be disposed to look up to a supreme Being. Religion, right or wrong, will subsist in some Shape or other, and some worship there will surely be
either

either of God or the Creature. As for your Ridicule, can any thing be more ridiculous, than to see the most unmeaning Men of the Age set up for Free-thinkers, Men so strong in Assertion, and yet so weak in Argument, Advocates for Freedom introducing a Fatality, Patriots trampling on the Laws of their Country, and Pretenders to Virtue, destroying the Motives of it? Let any impartial Man but cast an eye on the Opinions of the Minute Philosophers, and then say if any thing can be more ridiculous, than to believe such things, and at the same time laugh at Credulity.

XXV. *Lys.* Say what you will, we have the Laughers on our side: And as for your Reasoning I take it to be another Name for Sophistry. *Cri.* And I suppose by the same Rule you take your own Sophisms for Arguments. To speak plainly, I know no sort of Sophism that is not employ'd by Minute Philosophers against Religion. They are guilty of a *Petitio Principii*, in taking for granted that we believe Contradictions; of *non Causa pro Causa*, in affirming that uncharitable Feuds and Discords are the Effects of Christianity; of *Ignoratio elenchi*, in expecting Demonstration where we pretend only to Faith. If I was not afraid to offend the Delicacy of polite Ears, nothing were easier than to assign Instances of every kind of Sophism, which wou'd shew how skilful your own Philosophers are in the practice of that Sophistry you impute to others. *Euph.* For my own part, if Sophistry be the Art or Faculty of deceiving other Men, I must acquit these Gentlemen of it. They seem to have led me a progress through Atheism, Libertinism, Enthusiasm, Fatalism, not to convince me of the Truth of any of them, so much as to confirm me in my own way of Thinking. They have exposed their fairy Ware not to

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cheat but divert us. As I know them to be professed Masters of Ridicule, so in a serious sense I know not what to make of them. *ALC.* You do not know what to make of us! I shou'd be sorry you did. He must be a superficial Philosopher that is soon fathomed.

XXVI. *CRI.* The ambiguous Character is, it seems, the sure way to Fame and Esteem in the learned World, as it stands constituted at present. When the ingenious Reader is at a loss to determine whether his Author be Atheist or Deist or Polytheist, Stoic or Epicurean, Sceptic or Dogmatist, Infidel or Enthusiast, in jest or in earnest, he concludes him without hesitation to be ænigmatical and profound. In fact, it is true of the most admired Writers of the Age, That no Man alive can tell what to make of them, or what they would be at. *ALC.* We have among us Moles that dig deep under ground, and Eagles that soar out of sight. We can act all Parts and become all Opinions, putting them on or off with great freedom of Wit and Humour. *EUPH.* It seems then you are a pair of inscrutable, unfathomable, fashionable Philosophers. *ALC.* It cannot be denied. *EUPH.* But, I remember, you set out with an open dogmatical Air, and talked of plain Principles and evident Reasoning, promised to make things as clear as Noon-day, to extirpate wrong Notions and plant right in their stead. Soon after, you began to recede from you first Notions and adopt others: you advanced one while and retreated another, yielded and retracted, said and unsaid: And after having followed you through so many untrodden Paths and intricate Mazes I find my self never the nearer. *ALC.* Did we not tell you the Gentlemen of our Sect are great Proficients in Raillery? *EUPH.* But, methinks, it is a
vain

vain Attempt, for a plain Man of any settled Belief or Principles to engage with such slippery, fugitive, changeable Philosophers. It seems as if a Man shou'd stand still in the same place, while his Adversary chooses and changes his Situation, has full range and liberty to traverse the Field, and attack him on all sides and in all shapes, from a nearer or farther distance, on Horse-back or on Foot, in light or heavy Armour, in close Fight or with missive Weapons. *ALC.* It must be owned, a Gentleman hath great Advantage over a strait-laced Pedant or Bigot. *EUPH.* But after all, what am I the better for the Conversation of two such knowing Gentlemen; I hoped to have unlearned my Errors, and to have learned Truths from you, but, to my great disappointment, I do not find that I am either untaught or taught. *ALC.* To unteach Men their Prejudices is a difficult task: And this must first be done, before we can pretend to teach them the Truth. Besides, we have at present no time to prove and argue. *EUPH.* But suppose my Mind white Paper, and without being at any pains to extirpate my Opinions, or prove your own, only say what you wou'd write thereon, or what you wou'd teach me in case I were teachable. Be for once in earnest, and let me know some one Conclusion of yours before we part; or I shall intreat *Crito* to violate the Laws of Hospitality towards those who have violated the Laws of Philosophy, by hanging out false Lights to one benighted in Ignorance and Error. I appeal to you (said he turning to *Crito*) whether these Philosophical Knight-errants shou'd not be confined in this Castle of yours, till they make Reparation. *Euphranor* has Reason, said *Crito*, and my Sentence is that you remain here in durance, till you have done something towards satisfying the Engagement I am under, having promised,

he shou'd know your Opinions from your selves, which you also agreed to.

XXVII. *ALC.* Since it must be so, I will now reveal what I take to be the Sum and Substance, the grand Arcanum and ultimate Conclusion of our Sect, and that in two Words, ΠΑΝΤΑ ΤΠΟΛΗΨΙΣ. *CRI.* You are then a downright Sceptic. But, Sceptic as you are, you own it, probable there is a God, certain that the Christian Religion is useful, possible it may be true, certain that if it be the Minute Philosophers are in a bad way. This being the Case, how can it be questioned what course a wise Man shou'd take? Whether the Principles of Christians or Infidels are truest may be made a Question, but which are safest can be none. Certainly if you doubt of all Opinions you must doubt of your own; and then, for ought you know, the Christian may be true. The more doubt, the more room there is for Faith, a Sceptic of all Men having the least Right to demand Evidence. But, whatever uncertainty there may be in other Points, thus much is certain: either there is or is not a God: there is or is not a Revelation: Man either is or is not an Agent: The Soul is or is not Immortal. If the Negatives are not sure, the Affirmatives are possible. If the Negatives are improbable, the Affirmatives are probable. In Proportion, as any of your ingenious Men finds himself unable to prove any one of these Negatives, he hath grounds to suspect he may be mistaken. A Minute Philosopher, therefore, that wou'd act a consistent part, shou'd have the Diffidence, the Modesty, and the Timidity, as well as the Doubts, of a Sceptic; not pretend to an Ocean of Light, and then lead us to an Abyss of Darkness. If I have any Notion of Ridicule, this is most ridiculous. But your ridiculing what, for ought you know,

know, may be true, I can make no sense of. It is neither acting as a wise Man with regard to your own Interest, nor as a good Man with regard to that of your Country.

XXVIII. *Tully* saith somewhere, *aut undique religionem tolle aut usquequaque conserva*: Either let us have no Religion at all or let it be respected. If any single Instance can be shewn of a People that ever prospered without some Religion, or if there be any Religion better than the Christian, propose it in the grand Assembly of the Nation to change our Constitution, and either live without Religion, or introduce that new Religion. A Sceptic, as well as other Men, is Member of a Community, and can distinguish between Good and Evil, Natural or Political. Be this then his Guide as a Patriot, though he be no Christian. Or, if he doth not pretend even to this discernment, let him not pretend to correct or alter what he knows nothing of: Neither let him that only doubts behave as if he cou'd demonstrate. *Timagoras* is wont to say, I find my Country in possession of certain Tenets; they appear to have an useful Tendency, and, as such, are encouraged by the Legislature; they make a main part of our Constitution: I do not find these Innovators can disprove them, or substitute things more useful and certain in their stead; out of regard therefore to the Good of Mankind, and the Laws of my Country, I shall acquiesce in them. I do not say *Timagoras* is a Christian, but I reckon him a Patriot. Not to inquire in a Point of so great concern is folly, but it is still a higher degree of folly to condemn without inquiring. *Lyficles* seemed heartily tired of this Conversation. It is now late, said he to *Alciphron*, and all things are ready for our departure. Every one hath his own

way of Thinking ; and it is as impossible for me to adopt another Man's, as to make his Complexion and Features mine. *Alciphron* pleaded that, having complied with *Euphranor's* Conditions, they were now at Liberty : And *Euphranor* answered that, all he desired having been to know their Tenets, he had nothing further to pretend.

XXIX. The Philosophers being gone, I observed to *Crito* how unaccountable it was, that Men so easy to confute shou'd yet be so difficult to convince. This, said *Crito*, is accounted for by *Aristotle*, who tells us that Arguments have not an Effect on all Men, but only on them whose Minds are prepared by Education and Custom, as Land is for Seed *. Make a Point never so clear, it is great odds, that a Man, whose Habits and the Bent of whose Mind lie a contrary way, shall be unable to comprehend it. So weak a thing is Reason in Competition with Inclination. I replied, this answer might hold with respect to other Persons and other Times : but when the question was of inquisitive Men, in an Age wherein Reason was so much cultivated, and Thinking so much in vogue, it did not seem satisfactory. I have known it remarked, said *Crito*, by a Man of much Observation, that in the present Age Thinking is more talk'd of but less practised than in ancient times ; and that since the Revival of Learning Men have read much and wrote much but thought little : insomuch that with us to think closely and justly is the least part of a learned Man, and none at all of a polite Man. The Free-thinkers, it must be owned, make great Pretensions to Thinking, and yet they shew but little Exactness in it. A lively Man, said he, and what the World calls a Man of sense are often des-

* Ethic. ad Nicom. l. 10, c. 9.

tribute of this Talent, which is not a meer gift of Nature, but must be improved and perfected, by much Attention and Exercise on very different Subjects, a thing of more pains and time than the hasty Men of parts in our Age care to take. Such were the Sentiments of a judicious Friend of mine : And, if you are not already sufficiently convinced of these Truths, you need only cast an eye on the dark and confused, but nevertheless admired, Writers of this famous Sect : And then you will be able to judge, whether those who are led by Men of such wrong Heads can have very good ones of their own. Such, for instance, was *Spinoza* the great Leader of our modern Infidels, in whom are to be found many Schemes and Notions much admired and followed of late years : such as undermining Religion under the pretence of vindicating and explaining it : The maintaining it not necessary to believe in Christ according to the Flesh : The persuading Men that Miracles are to be understood only in a spiritual and allegorical sense : That Vice is not so bad a thing as we are apt to think : That Men are meer Machines impelled by fatal Necessity. I have heard, said I, *Spinoza* represented as a Man of close Argument and Demonstration. He did, replied *Crito*, demonstrate ; but it was after such a manner, as any one may demonstrate any thing. Allow a Man the privilege to make his own Definitions of common Words, and it will be no hard matter for him to infer Conclusions, which in one sense shall be true and in another false, at once seeming Paradoxes and manifest Truisms. For example, let but *Spinoza* define natural Right to be natural Power, and he will easily demonstrate, that whatever a Man can do he hath a right to do *. Nothing can be plainer than the folly of this Proceeding : but

* Traſtat. Politic. c. 2.

our Pretenders to the *lumen ficcum* are often so passionately prejudiced against Religion, as to swallow the grossest Nonsense and Sophistry of weak and wicked Writers for Demonstration.

XXX. And so great a Noise do these Men make, with their thinking, reasoning, and demonstrating, as to prejudice some well-meaning Persons against all Use and improvement of Reason. Honest *Demea*, having seen a Neighbour of his ruined by the Vices of a Free-thinking Son, contracted such a Prejudice against Thinking, that he wou'd not suffer his own to read *Euclid*, being told it might teach him to think ; till a Friend convinced him the epidemical Distemper was not Thinking, but only the want and affectation of it. I know an eminent Free-thinker, who never goes to bed, without a Gallon of Wine in his Belly, and is sure to replenish before the Fumes are off his Brain, by which means he has not had one sober Thought these seven Years ; another, that wou'd not for the World lose the Privilege and Reputation of Free-thinking, who games all Night, and lies in bed all Day : And as for the Outside or Appearance of Thought in that meagre Minute Philosopher *Ibycus*, it is an Effect, not of thinking, but of carking, cheating, and writing in an Office. Strange, said he, that such Men shou'd set up for Free-thinkers ! But it is yet more strange that other Men shou'd be out of Conceit with Thinking and Reasoning, for the sake of such Pretenders. I answered, that some good Men conceived an Opposition between Reason and Religion, Faith and Knowledge, Nature and Grace ; and that, consequently, the way to promote Religion was, to quench the light of Nature, and discourage all rational Inquiry.

XXXI.

XXXI. How right the Intentions of these Men may be, replied *Crito*, I shall not say ; but surely their Notions are very wrong. Can any thing be more dishonourable to Religion, than the representing it as an unreasonable, unnatural, ignorant Institution ? God is the Father of all Lights whether natural or revealed. Natural Concupiscence is one thing, and the Light of Nature another. You cannot therefore argue from the Former against the Latter : Neither can you from Science falsely so called, against real Knowledge. Whatever therefore is said of the one in Holy Scripture is not to be interpreted of the other. I insisted, that Humane Learning in the hands of Divines, had from time to time, created great Disputes and Divisions in the Church. As abstracted Metaphysics, replied *Crito*, have always had a Tendency to produce Disputes among Christians, as well as other Men, so it shou'd seem that genuine Truth and Knowledge wou'd allay this Humour, which makes Men sacrifice the undisputed Duties of Peace and Charity to disputable Notions. After all, said I, whatever may be said for Reason, it is plain, the Sceptics and Infidels of the Age are not to be cured by it. I will not dispute this Point, said *Crito* ; in order to cure a Distemper, you shou'd consider what produced it. Had Men reasoned themselves into a wrong Opinion, one might hope to reason them out of it. But this is not the Case ; the Infidelity of most Minute Philosophers seeming an Effect of very different Motives from Thought and Reason, little Incidents, Vanity, Disgust, Humour, Inclination, without the least assistance from Reason, are often known to make Infidels. Where the general Tendency of a Doctrine is disagreeable, the Mind is prepared to relish and improve every thing that with the least Pretence seems to make against it.

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Hence the coarse Manners of a Country Curate, the polite ones of a Chaplain, the Wit of a Minute Philosopher, a Jest, a Song, a Tale can serve instead of a Reason for Infidelity. *Bupalus* preferred a Rake in the Church, and then made use of him as an Argument against it. Vice, Indolence, Faction, and Fashion produce Minute Philosophers, and meer Petulancy not a few. Who then can expect a thing so irrational and capricious shou'd yield to Reason? It may, nevertheless, be worth while to argue against such Men, and expose their Fallacies, if not for their own sake, yet for the sake of others; as it may lessen their Credit, and prevent the growth of their Sect, by removing a Prejudice in their Favour, which sometimes inclines others as well as themselves to think they have made a Monopoly of Humane Reason.

XXXII. The most general Pretext which looks like Reason, is taken from the Variety of Opinions about Religion. This is a resting Stone to a lazy and superficial mind: But one of more Spirit and a juster way of Thinking, makes it a Step whence he looks about, and proceeds to examine, and compare the differing Institutions of Religion. He will observe, which of these is the most sublime and rational in its Doctrines, most venerable in its Mysteries, most useful in its Precepts, most decent in its Worship? Which createth the noblest Hopes, and most worthy Views? He will consider their Rise and Progress; which oweth least to Humane Arts or Arms? Which flatters the Senses and gross Inclinations of Men? Which adorns and improves the most excellent Part of our Nature? Which hath been propagated in the most wonderful Manner? Which hath surmounted the greatest Difficulties, or shew'd the most disinterested Zeal and Sincerity in its Professors? He will inquire,
which

which best accords with Nature and History? He will consider, what favours of the World, and what looks like Wisdom from above? He will be careful to separate Humane Allay from that which is Divine; and upon the whole, form his Judgment like a reasonable Free-thinker. But instead of taking such a rational Course, one of these hasty Sceptics shall conclude without demurring, there is no Wisdom in Politics, no Honesty in Dealings, no Knowledge in Philosophy, no Truth in Religion: And all by one and the same sort of Inference, from the numerous Examples of Folly, Knavery, Ignorance, and Error, which are to be met with in the World. But, as those who are unknowing in every thing else, imagine themselves sharp-sighted in Religion, this learned Sophism is ofteneſt levelled againſt Chriſtianity.

XXXIII. In my Opinion, he, that wou'd convince an Infidel who can be brought to Reason, ought in the firſt place clearly to convince him of the Being of a God, it ſeeming to me, that any Man who is really a Theiſt, cannot be an Enemy to the Chriſtian Religion: And that the Ignorance or Diſbelief of this fundamental Point, is that which at bottom conſtitutes the Minute Philoſopher. I imagine they, who are acquainted with the great Authors in the Minute Philoſophy, need not be told of this. The being of a God is capable of clear Proof, and a proper Object of Humane Reason; whereas the Myſteries of his Nature, and indeed whatever there is of Myſtery in Religion, to endeavour to explain, and prove by Reason, is a vain Attempt. It is ſufficient if we can ſhew there is nothing abſurd or repugnant in our Belief of thoſe Points, and, inſtead of framing Hypotheſes to explain them, we uſe our Reason only for answering the Objections brought againſt them. But
on

on all Occasions, we ought to distinguish the serious, modest, ingenuous Man of Sense, who hath Scruples about Religion, and behaves like a prudent Man in doubt, from the Minute Philosophers, those profane and conceited Men, who must needs proselyte others to their own Doubts. When one of this Stamp presents himself, we shou'd consider what Species he is of: Whether a first or a second-hand Philosopher, a Libertine, Scornor, or Sceptic? Each Character requiring a peculiar Treatment. Some Men are too ignorant to be humble, without which there can be no Docility: But though a Man must in some degree have thought and considered to be capable of being convinced, yet it is possible the most ignorant may be laugh'd out of his Opinions. I knew a Woman of Sense reduce two Minute Philosophers, who had long been a Nuisance to the Neighbourhood, by taking her Cue from their predominant Affectations. The one set up for being the most incredulous Man upon Earth, the other for the most unbounded Freedom. She observed to the first, that he who had Credulity sufficient to trust the most valuable Things, his Life and Fortune, to his Apothecary and Lawyer, ridiculously affected the Character of Incredulous, by refusing to trust his Soul, a Thing in his own account but a meer Trifle, to his Parish-Priest. The other, being what you call a Beau, she made sensible how absolute a Slave he was in point of Dress, to him the most important thing in the World, while he was earnestly contending for a Liberty of Thinking, with which he never troubled his Head; and how much more it concerned and became him to assert an Independency on Fashion, and obtain Scope for his Genius, where it was best qualified to exert it self. The Minute Philosophers at first hand are very few, and considered in themselves, of small consequence; But their
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Followers, who pin their Faith upon them, are numerous, and not less confident than credulous; there being something in the Air and Manner of these second-hand Philosophers, very apt to disconcert a Man of Gravity and Argument, and much more difficult to be born than the Weight of their Objections.

XXXIV. *Crito* having made an end, *Euphranor* declared it to be his Opinion, that it wou'd much conduce to the public Benefit, if, instead of discouraging Free-thinking, there was erected in the midst of this Free Country a Dianoetic Academy, or Seminary for Free-thinkers, provided with retired Chambers, and Galleries, and shady Walks and Groves, where, after seven Years spent in Silence and Meditation, a Man might commence a genuine Free-thinker, and from that time forward, have Licence to think what he pleased, and a Badge to distinguish him from Counterfeits. In good earnest, said *Crito*, I imagine that Thinking is the great *Desideratum* of the present Age; and that the real Cause of whatever is amiss, may justly be reckoned the general Neglect of Education, in those who need it most, the People of Fashion. What can be expected where those who have the most Influence, have the least Sense, and those who are sure to be followed, set the worst Example? Where Youth so uneducated are yet so forward? Where Modesty is esteemed Pusillanimity, and a Deference to Years, Knowledge, Religion, Laws, want of Sense and Spirit? Such untimely Growth of Genius wou'd not have been valued or encouraged by the wise Men of Antiquity; whose Sentiments on this Point are so ill suited to the Genius of our Times, that it is to be feared modern Ears cou'd not bear them. But however ridiculous such Maxims might seem to our *British* Youth, who are so capable and so forward

ward to try Experiments, and mend the Constitution of their Country, I believe it will be admitted by Men of Sense, that if the Governing part of Mankind wou'd in these Days, for Experiment's sake, consider themselves in that old *Homerical* Light as Pastors of the People, whose Duty it was to improve their Flock, they wou'd soon find that this is to be done by an Education very different from the Modern, and othergues Maxims than those of the Minute Philosophy. If our Youth were really inur'd to Thought and Reflexion, and an Acquaintance with the excellent Writers of Antiquity, we shou'd soon see that licentious Humour, vulgarly called *Free-thinking*, banished from the Presence of Gentlemen, together with Ignorance and ill Taste; which as they are inseparable from Vice, so Men follow Vice for the sake of Pleasure, and fly from Virtue through an abhorrence of Pain. Their Minds therefore betimes shou'd be formed and accustomed to receive Pleasure and Pain from proper Objects, or, which is the same thing, to have their Inclinations and Aversions rightly placed. *καλῶς χαίρειν ἢ μισεῖν*. This according to *Plato* and *Aristotle*, was the *ὀρθὴ παιδεία*, the right Education*. And those who, in their own Minds, their Health, or their Fortunes, feel the cursed Effects of a wrong one, wou'd do well to consider, they cannot better make amends for what was amiss in themselves, than by preventing the same in their Posterity. While *Crito* was saying this, Company came in, which put an end to our Conversation.

* *Plato* in *Protag.* & *Aristot.* ethic ad *Nicom.* l. 2. c. 2. & l. 10. c. 9.

AN
E S S A Y
TOWARDS A
NEW THEORY
OF
V I S I O N.

First Published in the Year, MDCCIX.



D U B L I N:

Printed for G. Risk, at the *Shakespear's Head*, G. Ewing,
at the *Angel and Bible*, and W. Smith, at the *Hercules*,
Bookfellers in *Dame-Street*, M DCC XXXII.

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A N
E S S A Y
T O W A R D S

A New Theory of Vision.

I.  Y Design is to shew the Manner, wherein we perceive by Sight the Distance, Magnitude, and Situation of Objects. Also to consider the Difference there is betwixt the Ideas of Sight and Touch, and whether there be any Idea common to both Senses.

II. It is, I think, agreed by all, that Distance, of it self and immediately, cannot be seen: For Distance being a Line directed end-wise to the Eye, it projects only one Point in the Fund of the Eye, which Point remains invariably the same, whether the Distance be longer or shorter.

III. I find it also acknowledged, that the Estimate we make of the Distance of Objects considerably remote, is rather an Act of Judgment grounded on Experience, than of Sense. For Example, when I perceive a great Number of intermediate Objects, such as Houses, Fields, Rivers, and the like, which I have experienced to take up a considerable Space, I thence form a Judgment or Conclusion, that the Object I see beyond them is at a great Distance. Again, when an Object appears faint and small, which at a near Distance I have experienced to make a vigorous and large Appearance, I instantly conclude it to be far off: And this, 'tis evident is the result of Experience; without which, from the faintness and littleness I should not have inferred any thing concerning the Distance of Objects.

IV. But when an Object is placed at so near a Distance, as that the Interval between the Eyes bears any sensible Proportion to it, the Opinion of speculative Men is, that the two Optic Axes (the Fancy that we see only with one Eye at once being exploded) concurring at the Object do there make an Angle, by means of which, according as it is greater or lesser, the Object is perceived to be nearer or farther off†.

V. Betwixt which, and the foregoing manner of estimating Distance, there is this remarkable Difference: That, whereas there was no apparent, necessary Connexion between small Distance and a large and strong Appearance, or between great Distance and little and faint Appearance, there appears a very necessary Connexion between an ob-

† See what Descartes and others have written on this Subject.

use Angle and near Distance, and an acute Angle and farther Distance. It does not in the least depend upon Experience, but may be evidently known by any one before he had experienced it, that the nearer the Concurrence of the Optic Axes, the greater the Angle, and the remoter their Concurrence is, the lesser will be the Angle comprehended by them.

VI. There is another way mentioned by Optic Writers, whereby they will have us judge of those Distances, in respect of which the Breadth of the Pupil hath any sensible bigness: And that is the greater or lesser Divergency of the Rays, which issuing from the visible Point, do fall on the Pupil: That Point being judged nearest, which is seen by most diverging Rays; and that remoter, which is seen by less diverging Rays: And so on, the apparent Distance still increasing, as the Divergency of the Rays decreases, till at length it becomes infinite, when the Rays that fall on the Pupil are to Sense Parallel. And after this manner it is said we perceive Distance when we look only with one Eye.

VII. In this Case also, 'tis plain we are not beholding to Experience: It being a certain, necessary Truth, that the nearer the direct Rays falling on the Eye approach to Parallelism, the farther off is the Point of their Intersection, or the visible Point from whence they flow.

VIII. Now though the Accounts here given of perceiving near Distance by Sight are receiv'd for true, and accordingly made use of in determining the apparent places of Objects, they do nevertheless

less seem very 'unsatisfactory: And that for these following Reasons.

IX. It is evident that when the Mind perceives any Idea, not immediately and of it self, it must be by the means of some other Idea: Thus, for Instance, the Passions which are in the Mind of another, are of themselves to me invisible. I may nevertheless perceive them by Sight, though not immediately, yet by means of the Colours they produce in the Countenance. We often see Shame or Fear in the Looks of a Man, by perceiving the Changes of his Countenance to Red or Pale.

X. Moreover it is evident that no Idea, which is not it self perceived, can be the means of perceiving any other Idea. If I do not perceive the Redness or Paleness of a Man's Face themselves, it is impossible I should perceive by them the Passions which are in his Mind.

XI. Now from SECT. II. it is plain that Distance is in its own nature imperceptible, and yet it is perceived by Sight. It remains, therefore, that it be brought into view by means of some other Idea, that is it self immediately perceived in the Act of Vision.

XII. But those Lines and Angles, by means whereof some Men pretend to explain the Perception of Distance, are themselves not at all perceived, nor are they in truth ever thought of by those unskilful in Optics. I appeal to any one's Experience, whether upon Sight of an Object, he computes its Distance by the bigness of the Angle, made by the meeting of the two Optic Axes? Or whether he ever thinks of the greater or lesser Divergency

gency of the Rays, which arrive from any Point to his Pupil? Every one is himself the best judge of what he perceives, and what not. In vain shall any Man tell me, that I perceive certain Lines and Angles which introduce into my Mind the various Ideas of Distance, so long as I my self am conscious of no such thing.

XIII. Since therefore those Angles and Lines are not themselves perceived by Sight, it follows from SECT. X. that the Mind does not by them judge of the Distance of Objects.

XIV. The Truth of this Assertion will be, yet, farther evident to any one that considers those Lines and Angles have no real Existence in Nature, being only an Hypothesis fram'd by the Mathematicians, and by them introduced into Optics, that they might treat of that Science in a Geometrical way.

XV. The last Reason I shall give for rejecting that Doctrine, is, that tho' we should grant the real Existence of those Optic Angles, &c. and that it was possible for the Mind to perceive them; yet these Principles wou'd not be found sufficient to explain the *Phænomena* of Distance, as shall be shewn hereafter.

XVI. Now, it being already shewn that Distance is suggested to the Mind, by the Mediation of some other Idea which is it self perceived in the Act of Seeing, it remains that we inquire what Ideas, or Sensations there be that attend Vision, unto which we may suppose the Ideas of Distance are connected, and by which they are introduced into the Mind. And *First*, It is certain by Experience,

rience, that when we look at a near Object with both Eyes, according as it approaches, or recedes from us, we alter the Disposition of our Eyes, by lessening or widening the Interval between the Pupils. This Disposition or Turn of the Eyes is attended with a Sensation, which seems to me to be that which in this Case brings the Idea of greater or lesser Distance into the Mind.

XVII. Not that there is any natural or necessary Connexion between the Sensation we perceive by the Turn of the Eyes, and greater or lesser Distance; but because the Mind has by constant Experience found the different Sensations corresponding to the different Dispositions of the Eyes, to be attended each with a different Degree of Distance in the Object; There has grown an Habitual or Customary Connexion between those two sorts of Ideas, so that the Mind no sooner perceives the Sensation arising from the different Turn it gives the Eyes, in order to bring the Pupils nearer, or farther asunder, but it withal perceives the different Idea of Distance which was wont to be connected with that Sensation: Just as upon hearing a certain Sound, the Idea is immediately suggested to the Understanding, which Custom had united with it.

XVIII. Nor do I see, how I can easily be mistaken in this Matter. I know evidently that Distance is not perceived of it self. That by consequence, it must be perceived by means of some other Idea which is immediately perceived, and varies with the different Degrees of Distance. I know also that the Sensation arising from the Turn of the Eyes is of it self immediately perceived, and various Degrees thereof are connected with

different

different Distances, which never fail to accompany them into my Mind, when I view an Object distinctly with both Eyes, whose Distance is so small that in respect of it the Interval between the Eyes has any considerable Magnitude.

XIX. I know it is a received Opinion, that by altering the Disposition of the Eyes, the Mind perceives whether the Angle of the Optic Axes, or the lateral Angles comprehended between the Interval of the Eyes and the Optic Axes, are made greater or lesser; and that accordingly by a kind of Natural Geometry, it judges the Point of their Intersection to be nearer, or farther off. But that this is not true, I am convinced by my own Experience, since I am not conscious, that I make any such use of the Perception I have by the Turn of my Eyes. And for me to make those Judgments, and draw those Conclusions from it, without knowing that I do so, seems altogether incomprehensible.

XX. From all which it follows, that the Judgment we make of the Distance of an Object, viewed with both Eyes, is entirely the Result of Experience. If we had not constantly found certain Sensations arising from the various Disposition of the Eyes, attended with certain Degrees of Distance, we shou'd never make those sudden Judgments from them, concerning the Distance of Objects; no more than we wou'd pretend to judge of a Man's Thoughts by his pronouncing Words we had never heard before.

XXI. *Secondly*, An Object placed at a certain Distance from the Eye, to which the breadth of the Pupil bears a considerable Proportion, being made

to approach, is seen more confusedly: And the nearer it is brought, the more confused Appearance it makes. And this being found constantly to be so, there ariseth in the Mind an Habitual Connexion between the several Degrees of Confusion and Distance; the greater Confusion still imploying the lesser Distance, and the lesser Confusion, the greater Distance of the Object.

XXII. This confused Appearance of the Object doth therefore seem to be the Medium, whereby the Mind judgeth of Distance in those Cases, wherein the most approved Writers of Optics will have it judge by the different Divergency, with which the Rays flowing from the Radiating Point fall on the Pupil. No Man, I believe, will pretend to see or feel those imaginary Angles, that the Rays are supposed to form according to their various Inclinations on his Eye. But he cannot choose Seeing whether the Object appear more or less confused. It is therefore a manifest Consequence from what has been demonstrated, that instead of the greater, or lesser Divergency of the Rays, the Mind makes use of the greater or lesser Confusedness of the Appearance, thereby to determine the apparent Place of an Object.

XXIII, Nor doth it avail to say, there is not any necessary Connexion between confused Vision, and Distance, great or small. For I ask any Man, what necessary Connexion he sees between the Redness of a Blush and Shame? And yet no sooner shall he behold that Colour to arise in the Face of another, but it brings into his Mind the Idea of that Passion which hath been observed to accompany it,

XXIV,

XXIV. What seems to have misled the Writers of Optics in this Matter is, that they imagine Men judge of Distance, as they do of a Conclusion in Mathematics; betwixt which and the Premises it is indeed absolutely requisite there be an apparent, necessary Connexion: But it is far otherwise, in the sudden Judgments Men make of Distance. We are not to think, that Brutes and Children, or even grown reasonable Men, whenever they perceive an Object to approach, or depart from them, do it by virtue of Geometry and Demonstration.

XXV. That one Idea may suggest another to the Mind, it will suffice that they have been observed to go together, without any Demonstration of the Necessity of their Coexistence, or without so much as knowing what it is that makes them so to coexist. Of this there are innumerable Instances, of which no one can be ignorant.

XXVI. Thus, greater Confusion having been constantly attended with nearer Distance, no sooner is the former Idea perceived, but it suggests the latter to our Thoughts. And if it had been the ordinary Course of Nature, that the farther off an Object were placed, the more confused it shou'd appear, it is certain, the very same Perception, that now makes us think an Object approaches, would then have made us to imagine it went farther off. That Perception, abstracting from Custom and Experience, being equally fitted to produce the Idea of great Distance, or small Distance, or no Distance at all.

XXVII. *Thirdly*, An Object being placed at the Distance above specified, and brought nearer to the Eye, we may nevertheless prevent, at least for some time, the Appearance's growing more
confused

confused, by straining the Eye. In which Case, that Sensation supplys the place of confused Vision, in aiding the Mind to judge of the Distance of the Object; it being esteemed so much the nearer, by how much the Effort or Straining of the Eye in order to distinct Vision is greater.

XXVIII. I have here set down those Sensations or Ideas, that seem to be the constant and general Occasions of introducing into the Mind the different Ideas of near Distance. It is true in most Cases, that divers other Circumstances contribute to frame our Idea of Distance, to wit, the particular Number, Size, Kind, &c. of the things seen. Concerning which, as well as all other the forementioned Occasions which suggest Distance, I shall only observe, they have none of them, in their own Nature, any Relation or Connexion with it: Nor is it possible, they shou'd ever signify the various Degrees thereof, otherwise than as by Experience they have been found to be connected with them.

XXIX. I shall proceed upon these Principles to account for a Phenomenon, which has hitherto strangely puzzled the Writers of Optics, and is so far from being accounted for by any of their Theories of Vision, that it is, by their own Confession, plainly repugnant to them: And of Consequence, if nothing else cou'd be objected, were alone sufficient to bring their Credit in Question. The whole Difficulty I shall lay before you in the Words of the Learned Dr. Barrow, with which he concludes his Optic Lectures.

Hæc sunt, quæ circa partem Opticæ præcipue Mathematicam dicenda mihi suggestit meditatio. Circa reliquas, (quæ præteritis sunt, adeoque sæpiusculæ pro certis principiis plausibiles conjecturæ

ras venditare necessum habent) nihil fere quicquam admodum verisimile succurrit, a pervulgatis (ab iis, inquam, quæ Keplerus, Scheinerus, Cartesius, & post illos alii tradiderunt) alienum aut diversum. Atqui tacere malo, quam toties oblatam cramben reponere. Proinde receptui cano; nec ita tamen ut prorsus discedam antequam improbam quandam difficultatem (pro sinceritate quam & vobis & veritati debeo minime dissimulandam) in medium protulero, quæ doctrinæ nostræ, hætenus inculcatæ, se objicit adversam, ab ea saltem nullam admittit solutionem.

Illæ, breviter, talis est: Lenti vel Speculo cavo

EBF exponatur punctum visibile A, ita Distans ut Radii ex A manantes ex inflexione versus axem A B cogantur. Sitque radiationis Limes (seu puncti A imago, qualem supra passim statuimus) punctum Z. Inter hoc autem & inflectentis verticem B uspiam positus concipiat Oculus. Quæri jam potest ubi loci debeat punctum A apparere? Retrorsum ad punctum Z videri non fert Natura (cum omnis impressio sensum afficiens proveniat a partibus A) ac experientia reclamant. Nostris autem e placitis consequi videtur, ipsum ad partes anticæ apparens ab intervallo longissime dissito, (quod & maxi-



mum sensibile quodvis Intervallum quodammodo exsuperet) apparere. Cum enim quo Radiis minus divergentibus attingitur Objectum, eo (scilicet utique prænotionibus & præjudiciis) longius abesse sentiatur; et quod Parallelos ad Oculum Radios

Radios projicit, remotissime positum aestimetur. Exigere Ratio videtur ut quod convergentibus radiis apprehenditur, adhuc magis, si fieri posset, quoad apparentiam elongetur. Quin & circa Casum hunc generatim inquiri possit, quidnam omnino sit, quod apparentem puncti A locum determinet, faciatque quod constanti ratione nunc propius, nunc remotius appareat? Cui itidem dubio, nihil quicquam ex hactenus dictorum Analogia, responderi posse videtur, nisi debere punctum A perpetuo longissime semotum videri. Verum experientia secus attestatur, illud pro diversa Oculi inter puncta B, Z, positione varie distans; nunquam fere (si unquam) longinquius ipso A libere spectato, subinde vero multo propinquius adparere; quinimo, quo oculum appellentes radii magis convergunt eo speciem Objecti propius accedere. Nempe, si puncto B admoveatur Oculus, suo (ad lentem) fere nativo in loco conspicitur punctum A (vel æque distans, ad Speculum;) ad O reductus oculus ejusce speciem appropinquantem cernit; ad P adhuc vicinius ipsum existimat; ac ita sensim, donec alicubi tandem, velut ad Q, constituto oculo objectum summe proquinquum apparens, in meram confusionem incipiat evanescere. Quæ sane cuncta rationibus atque decretis nostris repugnare videntur, aut cum iis saltem parum amice conspirant. Neque nostram tantum sententiam pulsant hoc experimentum; at ex æquo cæteras quas norim omnes, veterem imprimis ac vulgatam nostræ præ reliquis affinem ita corvellere videtur, ut ejus vi coactus doctissimus A. Tacquetus isti principio (cui pene soli totam inædificaverat Catoptricam suam) ceu infido ac inconstanti renunciavit, adeoque suam ipse doctrinam labefactavit; id tamen, opinor, minime facturus, si rem totam inspexisset penitus, atque

atque difficultatis fundum attigisset. Apud me vero non ita pollet hæc, nec eousque præpõlebit ulla difficultas, ut ab iis, quæ manifeste rationi consentanea video, discedam; præsertim quum ut hic accidit, ejusmodi difficultas in singularis cuiuspiam casus disparitate fundetur. Nimirum in præsentè casu peculiare quiddam, naturæ subtilitati involutum, delitescit, ægre fortassis, nisi perfectius explorato videndi modo, detegendum. Circa quod nil, fateor, hætenus excogitare potui, quod adblandiretur animo meo, nedum plane satisfaceret. Vobis itaque nodum hunc, utinam feliciore conatu, resolvendum committo.

In English as follows.

‘ I have here delivered what my Thoughts have
 ‘ suggested to me, concerning that part of Optics
 ‘ which is more properly Mathematical. As for
 ‘ the other Parts of that Science (which being rather
 ‘ Physical, do consequently abound with plausible
 ‘ Conjectures instead of certain Principles)
 ‘ there has in them scarce any thing occur’d to my
 ‘ Observation, different from what has been already
 ‘ said by Kepler, Scheinerus, Descartes, and others.
 ‘ And methinks I had better say nothing
 ‘ at all, than repeat that which has been so often
 ‘ said by others. I Think it therefore high time to
 ‘ take my leave of this Subject: But before I quit
 ‘ it for good and all, the fair and ingenuous Dealing
 ‘ that I owe both to You and to Truth,
 ‘ obligeth me to acquaint you with a certain
 ‘ untoward Difficulty, which seems directly
 ‘ opposite to the Doctrine I have been hitherto
 ‘ inculcating, at least, admits of no Solution
 ‘ from it. In short it is this. Before the
 ‘ double Convex Glass or Concave Speculum
 ‘ EBF,

' E B F, let the Point A be plac-
 ' ced, at such a Distance that the
 ' Rays proceeding from A, af-
 ' ter Refraction or Reflection,
 ' be brought to Unite some-
 ' where in the Ax A B. And
 ' suppose the Point of Union
 ' (*i. e.* the Image of the Point
 ' A, as hath been already set
 ' forth) to be Z; between which
 ' and B, the Vertex of the Glas
 ' or Speculum, conceive the Eye
 ' to be any where placed. The
 ' Question now is, where the
 ' Point A ought to appear? Ex-
 ' perience shews that it doth not
 ' appear behind at the Point Z,
 ' and it were contrary to Na-
 ' ture that it shou'd; since all
 ' the Impression which affects
 ' the Sense comes from towards A. But from
 ' our Tenets it shou'd seem to follow that it wou'd
 ' appear before the Eye at a vast Distance off, so
 ' great as shou'd in some Sort surpass all sensible
 ' Distance. For Since if we exclude all Anticipa-
 ' tions and Prejudices, every Object appears by so
 ' much the farther off, by how much the Rays it
 ' sends to the Eye are less Diverging. And that
 ' Object is thought to be most remote, from which
 ' Parallel Rays proceed unto the Eye. Reason
 ' wou'd make one think, that Object shou'd appear,
 ' at yet a greater Distance, which is seen by con-
 ' verging Rays. Moreover it may in general be
 ' asked concerning this Case, what it is that de-
 ' termines the apparent Place of the Point A, and
 ' maketh it to appear after a constant manner,
 ' sometimes nearer, at other times farther off? To
 ' which Doubt, I see nothing that can be answer'd
 ' agree-



agreeable to the Principles we have laid down, except only that the Point A ought always to appear extremely remote. But on the contrary, we are assur'd by Experience that the Point A appears variously distant, according to the different Situations of the Eye between the Points B and Z. And that it doth almost never (if at all) seem farther off, than it wou'd if it were beheld by the naked Eye, but on the contrary; it doth sometimes appear much nearer. Nay, it is even certain, that by how much the Rays falling on the Eye do more converge, by so much the nearer does the Object seem to approach. For the Eye being placed close to the Point B, the Object A appears nearly in its own natural Place, if the Point B is taken in the Glass, or at the same Distance, if in the Speculum. The Eye being brought back to O, the Object seems to draw near: And being come to P it beholds it still nearer. And so on by little and little, till at length the Eye being placed somewhere, suppose at Q, the Object appearing extremely near, begins to vanish into meer Confusion. All which doth seem repugnant to our Principles, at least, not rightly to agree with them. Nor is our Tenet alone struck at by this Experiment, but likewise all others that ever came to my Knowledge are, every whit as much, endanger'd by it. The ancient one especially (which is most commonly received, and comes nearest to mine) seems to be so effectually overthrown thereby, that the most learned *Tacquet* has been forced to reject that Principle, as false and uncertain, on which alone he had built almost his whole Catoptrics, and consequently by taking away the Foundation, hath himself pulled down the Superstructure he had raised on it. Which, nevertheless, I do not believe he wou'd have done, had he but considered'd

' der'd the whole matter more thoroughly, and ex-
 ' amined the Difficulty to the bottom. But as for
 ' me, neither this, nor any other Difficulty shall
 ' have so great an Influence on me, as to make me
 ' renounce that which I know to be manifestly a-
 ' greeable to Reason: Especially when, as it here
 ' falls out, the Difficulty is founded in the peculi-
 ' ar Nature of a certain odd and particular Case.
 ' For in the present Case something peculiar lies
 ' hid, which being involved in the Subtilty of Na-
 ' ture will, perhaps, hardly be discovered till such
 ' Time, as the manner of Vision is more perfectly
 ' made known. Concerning which, I must own,
 ' I have hitherto been able to find out nothing
 ' that has the least shew of Probability, not to
 ' mention Certainty. I shall, therefore, leave this
 ' Knot to be untied by you, wishing you may have
 ' better Success in it than I have had.

XXX. The ancient and receiv'd Principle,
 which Dr. Barrow here mentions as the main
 Foundation of Tacquet's Catoptrics, is that *every*
visible Point seen by Reflection from a Speculum, shall
appear placed at the Intersection of the reflected Ray,
and the Perpendicular of Incidence. Which Inter-
 section in the present Case, happening to be behind
 the Eye, it greatly shakes the Authority of that
 Principle, where on the aforementioned Author
 proceeds throughout his whole Catoptrics, in de-
 termining the apparent Place of Objects seen by
 Reflexion from any kind of Speculum.

XXXI. Let us now see how this Phænomenon
 agrees with our Tenets. The Eye the nearer it
 is placed to the Point B in the foregoing Figures,
 the more distinct is the Appearance of the Object;
 but as it recedes to O, the Appearance grows more
 Confused; and at P it sees the Object yet more
 Confused;

Confused; and so on till the Eye being brought back to Z sees the Object in the greatest Confusion of all. Wherefore by SECT. XXI. the Object shou'd seem to approach the Eye gradually, as it recedes from the Point B, that is at O it shou'd (in Consequence of the Principle I have laid down in the aforesaid Section) seem nearer than it did at B, and at P nearer than at O, and at Q nearer than at P; and so on, till it quite vanishes at Z. Which is the very matter of Fact, as any one that pleases may easily satisfy himself by Experiment.

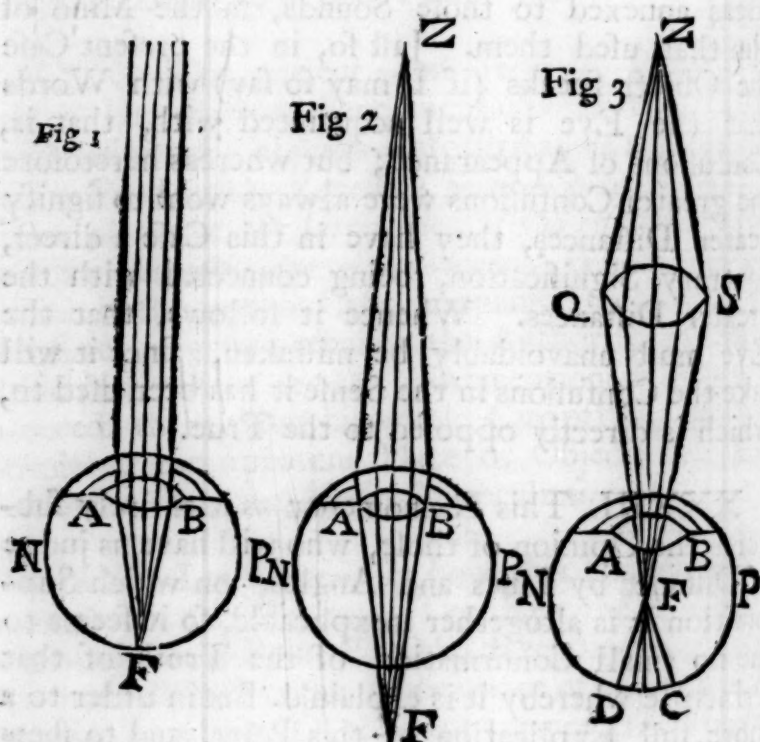
XXXII. This Case is much the same, as if we shou'd suppose an *Englisbman* to meet a Foreigner, who used the same Words with the *Englisb*, but in a direct contrary Signification. The *Englisbman* wou'd not fail to make a wrong Judgment of the Ideas annexed to those Sounds, in the Mind of him that used them. Just so, in the present Case the Object speaks (if I may so say) with Words that the Eye is well acquainted with, that is, Confusions of Appearance; but whereas heretofore the greater Confusions were always wont to signify nearer Distances, they have in this Case a direct, contrary Signification, being connected with the greater Distances. Whence it follows, that the Eye must unavoidably be mistaken, since it will take the Confusions in the Sense it has been used to, which is directly opposed to the True.

XXXIII. This Phænomenon as it entirely subverts the Opinion of those, who will have us judge of Distance by Lines and Angles, on which Supposition it is altogether inexplicable, so it seems to me no small Confirmation of the Truth of that Principle whereby it is explain'd. But in order to a more full Explication of this Point, and to shew how far the Hypothesis of the Mind's judg-

ing by the various Divergency of Rays, may be of use in determining the apparent Place of an Object, it will be necessary to premise some few Things, which are already well known to those who have any Skill in Dioptrics.

XXXIV. *First*, Any radiating Point is then distinctly seen when the Rays proceeding from it are, by the refractive Power of the Crystalline, accurately reunited in the Retina or Fund of the Eye: But if they are reunited, either before they arrive at the Retina, or after they have past it, then there is confused Vision.

XXXV. *Secondly*, Suppose in the adjacent Figures NP represent an Eye duly framed, and re-



taining

taining its natural Figure. In Fig. 1. the Rays falling nearly Parallel on the Eye, are by the Crystalline AB refracted, so as their Focus or Point of Union F falls exactly on the Retina: But if the Rays fall sensibly diverging on the Eye, as in Fig. 2. then their Focus falls beyond the Retina: Or if the Rays are made to converge by the Lens QS, before they come at the Eye, as in Fig. 3. their Focus F will fall before the Retina. In which two last Cases, it is evident from the foregoing Section, that the Appearance of the Point Z is confused. And by how much the greater is the Convergency, or Divergency of the Rays falling on the Pupil, by so much the farther will the Point of their Reunion be from the Retina, either before or behind it, and consequently the Point Z will appear, by so much the more confused. And this by the bye, may shew us the Difference between confused, and faint Vision. Confused Vision is, when the Rays proceeding from each distinct Point of the Object are not accurately recollected in one corresponding Point on the Retina, but take up some Space thereon: So that Rays from different Points become mixed, and confused together. This is opposed to a distinct Vision, and attends near Objects. Faint Vision is, when by reason of the Distance of the Object or Grossness of the interjacent Medium few Rays arrive from the Object to the Eye. This is opposed to vigorous or clear Vision, and attends remote Objects. But to return.

XXXVI. The Eye, or (to speak truly) the Mind perceiving only the Confusion it self, without ever considering the Cause from which it proceeds, doth constantly annex the same Degree of Distance to the same Degree of Confusion.

Whether that Confusion be occasioned by converging, or by diverging Rays, it matters not. Whence it follows, that the Eye viewing the Object Z through the Glass QS (which by Refraction causeth the Rays ZQ, ZS, &c. to converge) shou'd judge it to be at such a Nearness, at which if it were placed, it wou'd radiate on the Eye with Rays diverging to that Degree, as wou'd produce the same Confusion, which is now produced by Converging Rays, *i. e.* wou'd cover a Portion of the Retina equal to DC. *vid. Fig. 3. supra.* But then this must be understood (to use Dr. Barrow's Phrase) *seclusis prænotionibus & præjudiciis*, in case we abstract from all other Circumstances of Vision, such as the Figure, Size, Faintness, &c. of the visible Objects; all which do ordinarily concur to form our Idea of Distance, the Mind having by frequent Experience observed their several Sorts or Degrees, to be connected with various Distances.

XXXVII. It plainly follows from what hath been said, that a Person perfectly Purbblind (*i. e.* that cou'd not see an Object distinctly, but when placed close to his Eye) wou'd not make the same wrong Judgment that others do, in the forementioned Case. For, to him, greater Confusions constantly suggesting greater Distances, he must, as he recedes from the Glass, and the Object grows more Confused, judge it to be at a farther Distance contrary to what they do, who have had the Perception of the Objects growing more confused, connected with the Idea of Approach.

XXXVIII. Hence also it doth appear, there may be good use of Computation by Lines and Angles in Optics; not that the Mind judgeth of Distance immediately by them, but because it judgeth

eth by somewhat which is connected with them, and to the Determination whereof they may be subservient. Thus the Mind judging of the Distance of an Object, by the Confusedness of its Appearance, and this Confusedness being greater or lesser to the naked Eye, according as the Object is seen by Rays more or less diverging, it follows, that a Man may make use of the Divergency of the Rays in computing the apparent Distance, though not for its own sake, yet on account of the Confusion with which it is connected. But, so it is, the Confusion it self is intirely neglected by Mathematicians, as having no necessary Relation with Distance, such as the greater or lesser Angles of Divergency are conceived to have. And these (especially for that they fall under Mathematical Computation) are alone regarded, in determining the apparent Places of Objects, as though they were the sole and immediate Cause of the Judgments the Mind makes of Distance. Whereas, in Truth, they shou'd not at all be regarded in themselves, or any otherwise, than as they are supposed to be the Cause of Confused Vision.

XXXIX. The not considering of this has been a fundamental and perplexing Oversight. For Proof whereof, we need go no farther than the Case before us. It having been observed, that the most diverging Rays brought into the Mind the Idea of nearest Distance, and that still, as the Divergency decreased, the Distance increased: and it being thought, the Connexion between the various Degrees of Divergency and Distance, was immediate, this naturally leads one to conclude, from an ill grounded Analogy, that converging Rays shall make an Object appear at an immense Distance: And that, as the Convergency increases, the Distance (if it were possible) shou'd do so likewise.

That this was the Cause of Dr. Barrow's Mistake, is evident from his own Words which we have quoted. Whereas had the learned Doctor observ'd, that diverging and converging Rays, how opposite soever they may seem, do nevertheless agree in producing the same Effect, to wit, Confusedness of Vision, greater Degrees whereof are produced indifferently, either as the Divergency or Convergency of the Rays increaseth. And that it is by this Effect, which is the same in both, that either the Divergency or Convergency is perceived by the Eye; I say had he but consider'd this, it is certain he would have made a quite contrary Judgment, and rightly concluded, that those Rays which fall on the Eye with greater Degrees of Convergency shou'd make the Object from whence they proceed, appear by so much the nearer. But it is plain, it was impossible for any Man to attain to a right Notion of this Matter, so long as he had regard only to Lines and Angles, and did not apprehend the true Nature of Vision, and how far it was of Mathematical Consideration.

XL. Before we dismiss this Subject, it is fit we take notice of a Query relating thereto, proposed by the ingenious Mr. *Molyneux*, in his Treatise of Dioptrics*, where speaking of this Difficulty, he has these Words: 'And so he (*i. e.* Dr. Barrow) leaves this Difficulty to the Solution of others, which I (after so great an Example) shall do likewise; but with the Resolution of the same admirable Author of not quitting the evident Doctrine which we have before laid down, for determining the *Locus Objecti*, on account of being press'd by one Difficulty, which seems inexplicable till a more intimate Knowledge of the Vi-

* par. I. prop. 31. Sect. 9.

‘ five Faculty be obtained by Mortals. In the
 ‘ mean time, I propose it to the Consideration of
 ‘ the Ingenious, Whether the *Locus Apparens* of an
 ‘ Object placed as in this 9th Section, be not as
 ‘ much before the Eye, as the distinct Base is be-
 ‘ hind the Eye ?” To which Query we may ven-
 ture to answer in the Negative. For in the pre-
 sent Case, the Rule for determining the Distance of
 the distinct Base, or respective Focus from the
 Glass is this: *As the Difference between the Distance*
of the Object and Focus is to the Focus or Focal Length,
so the Distance of the Object from the Glass is to the
Distance of the respective Focus or distinct Base from
the Glass *. Let us now suppose the Object to be
 placed at the Distance of the Focal Length, and
 one half of the Focal Length from the Glass, and
 the Eye close to the Glass, hence it will follow
 by the Rule, that the Distance of the distinct Base
 behind the Eye is double the true Distance of the
 Object before the Eye. If therefore Mr. *Molyneux’s*
 Conjecture held good, it wou’d follow that the
 Eye shou’d see the Object, twice as far off as it
 really is ; and in other Cases at three or four times
 its due Distance, or more. But this manifestly
 contradicts Experience, the Object never appear-
 ing, at farthest, beyond its due Distance. What
 ever therefore is built on this Supposition (*vid.*
Corol. 1. Prop. 57. ibid.) comes to the Ground along
 with it.

XLI. From what hath been premis’d, it is a
 manifest Consequence, that a Man born blind, be-
 ing made to see, wou’d, at first, have no Idea of
 Distance by Sight ; The Sun and Stars, the remo-
 test Objects as well as the nearer wou’d all seem to
 be in his Eye, or rather in his Mind. The Ob-

* Molyneux Dioptr. par. I. prop. 5.

jects intromitted by Sight, wou'd seem to him (as in truth they are) no other than a new Set of Thoughts or Sensations, each whereof is as near to him, as the Perceptions of Pain or Pleasure, or the most inward Passions of his Soul. For our judging Objects perceiv'd by Sight to be at any Distance, or without the Mind, is (*vid.* SECT. XXVIII.) intirely the Effect of Experience, which one in those Circumstances cou'd not yet have attained to.

XLII. It is indeed otherwise upon the common Supposition, that Men judge of Distance by the Angle of the Optic Axes, just as one in the Dark, or a Blind-man by the Angle comprehended by two Sticks, one whereof he held in each Hand, For if this were true, it wou'd follow that one blind from his Birth being made to see, shou'd stand in need of no new Experience, in order to perceive Distance by Sight. But that this is false, has, I think, been sufficiently demonstrated.

XLIII. And perhaps upon a strict Inquiry, we shall not find that even those, who from their Birth have grown up in a continu'd Habit of Seeing, are irrecoverably prejudiced on the other side, to wit, in thinking what they see to be at a Distance from them. For at this time it seems agreed on all hands, by those who have had any Thoughts of that Matter, that Colours, which are the proper and immediate Object of Sight, are not without the Mind. But then it will be said, by Sight we have also the Ideas of Extension, and Figure, and Motion; all which may well be thought without, and at some Distance from the Mind, though Colour shou'd not. In answer to this, I appeal to any Man's Experience, whether the visible Extension of any Object doth not appear as near to him, as
the

the Colour of that Object; Nay, whether they do not both seem to be in the very same Place. Is not the Extension we see Coloured, and is it possible for us, so much as in Thought, to separate and abstract Colour from Extension? Now, where the Extension is, there surely is the Figure, and there the Motion too. I speak of those which are perceived by Sight.

XLIV. But for a fuller Explication of this Point, and to shew that the immediate Objects of Sight are not so much as the Ideas or Resemblances of things placed at a Distance, it is requisite that we look nearer into the Matter, and carefully observe what is meant in common Discourse, when one says, that which he sees is at a Distance from him. Suppose, for Example, that looking at the Moon I shou'd say it were fifty or sixty Semidiameters of the Earth distant from me. Let us see what Moon this is spoken of: It is plain it cannot be the visible Moon, or any thing like the visible Moon, or that which I see, which is only a round, luminous Plain, of about thirty visible Points in Diameter. For in case I am carried from the place where I stand directly towards the Moon, it is manifest the Object varies, still as I go on; and by the time that I am advanced fifty or sixty Semidiameters of the Earth, I shall be so far from being near a small, round, luminous Flat, that I shall perceive nothing like it; this Object having long since disappeared, and if I wou'd recover it, it must be by going back to the Earth from whence I set out. Again, suppose I perceive by Sight the faint and obicure Idea of something, which I doubt whether it be a Man, or a Tree, or a Tower, but judge it to be at the Distance of about a Mile. 'Tis plain I cannot mean, that what I see is a Mile off, or that it is the Image or Likeness of any thing which is a Mile off, since
that

that every Step I take towards it, the Appearance alters, and from being obscure, small, and faint, grows clear, large and vigorous. And when I come to the Mile's end, that which I saw first is quite lost, neither do I find any thing in the likeness of it.

XLV. In these and the like Instances, the truth of the Matter stands thus: Having of a long time experienced certain Ideas, perceivable by Touch, as Distance, tangible Figure, and Solidity, to have been connected with certain Ideas of Sight, I do upon perceiving these Ideas of Sight, forthwith conclude what Tangible Ideas are, by the wonted ordinary course of Nature, like to follow. Looking at an Object I perceive a certain visible Figure and Colour, with some degree of Faintness and other Circumstances, which from what I have formerly observed, determine me to think, that if I advance forward so many Paces or Miles, I shall be affected with such and such Ideas of Touch: So that in truth and strictness of Speech, I neither see Distance it self, nor any thing that I take to be at a Distance. I say, neither Distance, nor things placed at a Distance are themselves, or their Ideas, truly perceived by Sight. This I am persuaded of, as to what concerns my self; and I believe whoever will look narrowly into his own Thoughts, and examine what he means by saying, he sees this or that thing at a Distance, will agree with me, that what he sees only suggests to his Understanding, that after having passed a certain Distance, to be measured by the Motion of his Body, which is perceivable by Touch, he shall come to perceive such and such tangible Ideas which have been usually connected with such and such visible Ideas. But that one might be deceived by these suggestions of Sense, and that there is no necessary Connexion

nexion between visible and tangible Ideas suggested by them, we need go no farther than the next Looking-glass or Picture to be convinced. Note, that when I speak of Tangible Ideas, I take the word Idea for any the immediate Object of Sense, or Understanding, in which large Signification it is commonly used by the Moderns.

XLVI. From what we have shewn it is a manifest Consequence, that the Ideas of Space, Outness, and Things placed at a Distance, are not, strictly speaking, the Object of Sight; they are not otherwise perceived by the Eye than by the Ear. Sitting in my Study I hear a Coach drive along the Street; I look through the Casement and see it; I walk out and enter into it; thus, common Speech wou'd incline one to think, I heard, saw, and touch'd the same thing, to wit, the Coach. It is nevertheless certain, the Ideas intromitted by each Sense are widely different, and distinct from each other; but having been observed constantly to go together, they are spoken of as one and the same thing. By the variation of the Noise I perceive the different Distances of the Coach, and know that it approaches before I look out. Thus by the Ear I perceive Distance, just after the same manner as I do by the Eye.

XLVII. I do not nevertheless say, I hear Distance in like manner as I say that I see it, the Ideas perceived by Hearing not being so apt to be confounded with the Ideas of Touch, as those of Sight are; so likewise a Man is easily convinced that Bodies and external Things are not properly the Object of Hearing, but only Sounds, by the Mediation whereof the Idea of this or that Body, or Distance is suggested to his Thoughts. But then one is with more difficulty brought to discern the

the Difference there is betwixt the Ideas of Sight and Touch: Though it be certain, a Man no more sees or feels the same thing, than he hears and feels the same thing.

XLVIII. One Reason of which seems to be this. It is thought a great Absurdity to imagine, that one and the same thing shou'd have any more than one Extension, and one Figure. But the Extension and Figure of a Body, being let into the Mind two ways, and that indifferently, either by Sight or Touch, it seems to follow that we see the same Extension, and the same Figure which we feel.

XLIX. But if we take a close and accurate View of Things, it must be acknowledged that we never see and feel one and the same Object. That which is seen is one thing, and that which is felt is another; if the visible Figure and Extension be not the same with the tangible Figure and Extension, we are not to infer that one and the same thing has divers Extensions. The true Consequence is, that the Objects of Sight and Touch are two distinct things. It may perhaps require some Thought rightly to conceive this Distinction. And the Difficulty seems not a little increased, because the Combination of Visible Ideas hath constantly the same Name, as the Combination of Tangible Ideas wherewith it is connected: Which doth of necessity arise from the use and end of Language.

L. In order therefore to treat accurately and unconfusedly of Vision, we must bear in mind that there are two sorts of Objects apprehended by the Eye, the one primarily and immediately, the other secondarily and by Intervention of the former. Those

Those of the first sort neither are, nor appear to be without the Mind, or at any Distance off; they may indeed grow greater, or smaller, more confused, or more clear, or more faint, but they do not, cannot approach or recede from us. Whenever we say an Object is at a Distance, whenever we say it draws near, or goes farther off, we must always mean it of the latter sort, which properly belong to the Touch, and are not so truly perceived, as suggested by the Eye in like manner as Thoughts by the Ear.

LI. No sooner do we hear the Words of a familiar Language pronounced in our Ears, but the Ideas corresponding thereto present themselves to our Minds; in the very same instant the Sound and the Meaning enter the Understanding: So closely are they united, that it is not in our Power to keep out the one, except we exclude the other also. We even act in all respects as if we heard the very Thoughts themselves. So likewise the secondary Objects, or those which are only suggested by Sight, do often more strongly affect us, and are more regarded than the proper Objects of that Sense; along with which they enter into the Mind, and with which they have a far more strict Connexion, than Ideas have with Words. Hence it is, we find it so difficult to discriminate between the immediate and mediate Objects of Sight, and are so prone to attribute to the former, what belongs only to the latter. They are, as it were, most closely twisted, blended, and incorporated together. And the Prejudice is confirmed and riveted in our Thoughts by a long tract of Time, by the use of Language, and want of Reflexion. However, I believe any one that shall attentively consider what we have already said, and shall say upon this Subject before we have done, (especially if

if he pursue it in his own Thoughts) may be able to deliver himself from that Prejudice. Sure I am 'tis worth some Attention, to whoever wou'd understand the true nature of Vision.

LII. I have now done with Distance, and proceed to shew how it is, that we perceive by Sight the Magnitude of Objects. It is the Opinion of some that we do it by Angles, or by Angles in conjunction with Distance; but neither Angles, nor Distance being perceivable by Sight, and the things we see being in truth at no Distance from us, it follows, that as we have shewn Lines and Angles not to be the Medium, the Mind makes use of in apprehending the Apparent Place, so neither are they the Medium whereby it apprehends the Apparent Magnitude of Objects.

LIII. It is well known that the same Extension at a near Distance shall subtend a greater Angle, and at a farther Distance, a lesser Angle. And by this Principle (we are told) the Mind estimates the Magnitude of an Object comparing the Angle under which it is seen with its Distance, and thence inferring the Magnitude thereof. What inclines Men to this Mistake (beside the Humour of making one see by Geometry is, that the same Perceptions or Ideas which suggest Distance, do also suggest Magnitude. But if we examine it, we shall find they suggest the latter, as immediately as the former. I say, they do not first suggest Distance, and then leave it to the Judgment to use that as a Medium, whereby to collect the Magnitude; but they have as close, and immediate a Connexion with the Magnitude, as with the Distance; and suggest Magnitude as independently of Distance, as they do Distance independently of Magnitude. All
which

which will be evident to whoever considers what hath been already said, and what follows.

LIV. It hath been shewn, there are two sorts of Objects apprehended by Sight; each whereof hath its distinct Magnitude, or Extension. The one, properly Tangible, *i. e.* to be perceived and measured by Touch, and not immediately falling under the Sense of seeing: The other, properly and immediately Visible, by Mediation of which the former is brought in View. Each of these Magnitudes are greater or lesser, according as they contain in them more or fewer Points, they being made up of Points or Minimums. For, whatever may be said of Extension in Abstract, it is certain sensible Extension is not infinitely Divisible. There is a *Minimum Tangibile*, and a *Minimum Visibile*, beyond which Sense cannot perceive. This every one's Experience will inform him.

LV. The Magnitude of the Object which exists without the Mind, and is at a Distance, continues always invariably the same: But the Visible Object still changing as you approach to, or recede from the Tangible Object, it hath no fixed and determinate Greatness. Whenever therefore, we speak of the Magnitude of any thing, for Instance a Tree or a House, we must mean the Tangible Magnitude, otherwise there can be nothing steady and free from Ambiguity spoken of it. But though the Tangible and Visible Magnitude in truth belong to two distinct Objects: I shall nevertheless (especially since those Objects are called by the same Name, and are observed to coexist) to avoid tediousness and singularity of Speech, sometimes speak of them, as belonging to one and the same thing.

LVI.

LVI. Now in order to discover by what means, the Magnitude of Tangible Objects is perceived by Sight; I need only reflect on what passes in my own Mind, and observe what those things be, which introduce the Ideas of greater or lesser into my Thoughts, when I look on any Object. And these I find to be, First, the Magnitude or Extension of the Visible Object, which being immediately perceived by sight, is connected with that other which is Tangible, and placed at a Distance. Secondly, The Confusion or Distinctness. And Thirdly, the Vigorousness or Faintness of the aforesaid Visible Appearance. *Cæteris paribus*, by how much the greater or lesser, the Visible Object is, by so much the greater or lesser, do I conclude the Tangible Object to be. But, be the Idea immediately perceived by Sight never so large, yet if it be withal Confused, I judge the Magnitude of the thing to be but small. If it be Distinct and Clear, I judge it greater. And if it be Faint, I apprehend it to be yet greater. What is here meant, by Confusion and Faintness, hath been explained in SECT. XXXV.

LVII. Moreover the Judgments we make of Greatness do, in like manner as those of Distance, depend on the Disposition of the Eye, also on the Figure, Number and Situation of Objects and other Circumstances that have been observ'd to attend great, or small Tangible Magnitudes. Thus, for Instance, the very same Quantity of Visible Extension, which in the Figure of a Tower, doth suggest the Idea of great Magnitude, shall, in the Figure of a Man suggest the Idea of much smaller Magnitude. That this is owing to the Experience we have had of the usual Bigness of a Tower and a Man, no one, I suppose, need be told.

LVIII. It is also evident, that Confusion or Faintness, have no more a necessary Connexion with

with little or great Magnitude, than they have with little or great Distance. As they suggest the latter, so they suggest the former to our Minds. And by Consequence, if it were not for Experience, we shou'd no more judge a faint or confused Appearance to be connected with great or little Magnitude, than we shou'd that it was connected with great or little Distance.

LIX. Nor will it be found, that great or small Visible Magnitude hath any necessary Relation to great or small Tangible Magnitude: So that the one may certainly be infer'd from the other. But, before we come to the Proof of this, it is fit we consider the Difference there is betwixt the Extension and Figure which is the proper Object of Touch, and that other which is termed Visible; and how the former is principally, though not immediately taken notice of, when we look at any Object. This has been before mentioned, but we shall here inquire into the Cause thereof. We regard the Objects that environ us, in proportion as they are adapted to benefit or injure our own Bodies, and thereby produce in our Minds the Sensations of Pleasure or Pain. Now Bodies operating on our Organs, by an immediate Application, and the Hurt or Advantage arising therefrom, depending altogether on the Tangible, and not at all on the Visible, Qualities of any Object: This is a plain Reason, why those shou'd be regarded by us much more than these; and for this End, the Visive Sense seems to have been bestowed on Animals, to wit, that by the Perception of Visible Ideas (which in themselves are not capable of affecting, or any wise altering the Frame of their Bodies) they may be able to foresee (from the Experience they have had, what Tangible Ideas are connected with such, and such Visible Ideas)

the Damage or Benefit which is like to ensue, upon the Application of their own Bodies to this or that Body which is at a Distance. Which Fore-sight, how necessary it is to the preservation of an Animal, every one's Experience can inform him. Hence it is, that when we look at an Object, the Tangible Figure and Extension thereof are principally attended to; whilst there is small heed taken of the Visible Figure and Magnitude, which, though more immediately perceived, do less concern us, and are not fitted to produce any Alteration in our Bodies.

LX. That the Matter of Fact is true, will be evident to any one, who considers that a Man placed at Ten Foot Distance, is thought as great, as if he were placed at the Distance only of Five Foot; which is true, not with Relation to the Visible, but Tangible Greatness of the Object. The Visible Magnitude being far greater, at one Station, than it is at the other.

LXI. Inches, Feet, &c. are settled, stated Lengths, whereby we measure Objects, and estimate their Magnitude, we say, for Example, an Object appears to be six Inches, or Six Foot long. Now, that this cannot be meant of Visible Inches, &c. is evident, because a Visible Inch is it self no constant, determinate Magnitude, and cannot therefore serve to mark out, and determine the Magnitude of any other thing. Take an Inch mark'd upon a Ruler; view it, successively, at the distance of half a Foot, a Foot, a Foot and a Half, &c. from the Eye: At each of which, and at all the intermediate Distances, the Inch shall have a different Visible Extension, *i. e.* there shall be more or fewer Points discerned in it. Now I ask which of all these various Extensions, is that stated, determinate

minate one, that is agreed on, for a common Measure of other Magnitudes? No Reason can be assigned, why we shou'd pitch on one, more than another: And except there be some invariable, determinate Extension fixed on to be marked by the Word Inch, it is plain, it can be used to little Purpose; and to say, a Thing contains this or that Number of Inches, shall imply no more than that it is extended, without bringing any particular Idea of that Extension into the Mind. Farther, an Inch and a Foot, from different Distances, shall both exhibit the same Visible Magnitude, and yet at the same time, you shall say, that one seems several times greater than the other. From all which it is manifest, that the Judgments we make of the Magnitude of Objects by Sight, are altogether in reference to their Tangible Extension. Whenever we say an Object is Great, or Small, of this or that determinate Measure, I say, it must be meant of the Tangible, and not the Visible Extension, which, though immediately perceived, is nevertheless little taken notice of

LXII. Now, that there is no necessary Connexion, between these two Distinct Extensions is evident from hence: Because our Eyes might have been framed in such a manner, as to be able to see nothing but what were less than the *Minimum Tangibile*. In which Case, it is not impossible we might have perceived all the immediate Objects of Sight, the very same that we do now: But unto those Visible Appearances, there wou'd not be connected those different Tangible Magnitudes, that are now. Which shews, the Judgments we make of the Magnitude of Things placed at a distance, from the various Greatness of the Immediate Objects of Sight, do not arise from any Essential or Necessary, but only

a Customary Tye, which has been observ'd between them.

LXIII. Moreover, it is not only certain, that any Idea of Sight might not have been connected with this or that Idea of Touch, which we now observe to accompany it: But also, that the greater Visible Magnitudes might have been connected with, and introduced into our Minds lesser Tangible Magnitudes, and the lesser Visible Magnitudes greater Tangible Magnitudes. Nay, that it actually is so, we have daily Experience; that Object which makes a strong and large Appearance, not seeming near so great as another, the Visible Magnitude whereof is much less, but more faint, and the Appearance upper, or which is the same thing painted lower on the *Retina*, which Faintness and Situation suggest both greater Magnitude and greater Distance.

LXIV. From which, and from SECT. LVII. and LVIII. it is manifest, that as we do not perceive the Magnitudes of Objects immediately by Sight, so neither do we perceive them, by the Mediation of any thing which has a necessary Connexion with them. Those Ideas that now suggest unto us the various Magnitudes of External Objects, before we touch them, might possibly have suggested no such thing: Or they might have signified them, in a direct contrary manner, so that the very same Ideas, on the Perception whereof we judge an Object to be Small, might as well have serv'd to make us conclude it Great. Those Ideas being in their own Nature equally fitted to bring into our Minds the Idea of Small or Great, or no Size at all of outward Objects; just as the Words of any Language are in their own Nature indifferent to signify this or that thing, or nothing at all.

LXV.

LXV. As we see Distance, so we see Magnitude. And we see both, in the same way that we see Shame or Anger in Looks of a Man. Those Passions are themselves Invisible, they are nevertheless let in by the Eye along with Colours and Alterations of Countenance, which are the immediate Object of Vision: And which signify them for no other Reason, than barely because they have been observed to accompany them. Without which Experience, we shou'd no more have taken Blushing for a Sign of Shame, than of Gladness

LXVI. We are nevertheless exceeding prone to imagine those things, which are perceived only by the Mediation of others, to be themselves the immediate Objects of Sight; or, at least, to have in their own Nature a Fitness to be suggested by them, before ever they had been experienced to coexist with them. From which Prejudice every one, perhaps, will not find it easy to emancipate himself, by any the clearest Convictions of Reason. And there are some Grounds to think, that if there was one only invariable and universal Language in the World, and that Men were born with the Faculty of speaking it, it wou'd be the Opinion of many, that the Ideas in other Mens Minds were properly perceived by the Ear, or had at least a necessary and inseparable Tye with the Sounds that were affixed to them. All which seems to arise from want of a due Application of our discerning Faculty, thereby to discriminate between the Ideas that are in our Understandings, and consider them apart from each other; which wou'd preserve us from confounding those that are different, and make us see what Ideas do, and what do not include or imply this or that other Idea.

LXVII. There is a Celebrated Phænomenon, the Solution whereof I shall attempt to give, by the Principles that have been laid down, in reference to the manner wherein we apprehend by Sight the Magnitude of Objects. The apparent Magnitude of the Moon when placed in the Horizon, is much greater than when it is in the Meridian. Though the Angle under which the Diameter of the Moon is seen, be not observed greater in the former Case, than in the latter: And the Horizontal Moon doth not constantly appear of the same Bigness, but at some times seemeth far greater than at others.

LXVIII. Now in order to explain the Reason of the Moon's appearing greater than ordinary in the Horizon, it must be observed, that the Particles which compose our Atmosphere intercept the Rays of Light proceeding from any Object to the Eye; and by how much the greater is the Portion of Atmosphere, interjacent between the Object and the Eye, by so much the more are the Rays intercepted; and by consequence, the Appearance of the Object rendered more Faint, every Object appearing more Vigorous or more Faint, in Proportion as it sendeth more or fewer Rays, into the Eye. Now, between the Eye and the Moon, when situated in the Horizon, there lies a far greater Quantity of Atmosphere, than there does when the Moon is in the Meridian. Whence it comes to pass, that the Appearance of the Horizontal Moon is fainter, and therefore by SECT. LVI. it shou'd be thought bigger in that Situation, than in the Meridian, or in any other Elevation above the Horizon,

LXIX. Farther, the Air being variously impregnated, sometimes more and sometimes less
with

with Vapours and Exhalations fitted to retund and intercept the Rays of Light, it follows, that the Appearance of the Horizontal Moon hath not always an equal Faintness, and by Consequence, that Luminary, tho' in the very same Situation, is at one time judged greater than at another.

LXX. That we have here given the true Account of the Phænomena of the Horizontal Moon, will, I suppose, be farther evident to any one from the following Considerations. *First*, It is plain, that which in this Case suggests the Idea of greater Magnitude, must be something which is it self perceived; for, that which is unperceived cannot suggest to our Perception any other thing. *Secondly*, It must be something that does not constantly remain the same, but is subject to some Change or Variation, since the Appearance of the Horizontal Moon varies, being at one time greater than at another. And yet, *Thirdly*, It cannot be the visible Figure or Magnitude, since that remains the same, or is rather lesser, by how much the Moon is nearer to the Horizon. It remains therefore, that the true Cause is that Affection or Alteration of the Visible Appearance, which proceeds from the greater Paucity of Rays arriving at the Eye, and which I term Faintness: Since this answers all the forementioned Conditions, and I am not conscious of any other Perception that doth.

LXXI. Add to this, that in misty Weather it is a common Observation, that the Appearance of the Horizontal Moon is far larger than usual, which greatly conspires with, and strengthens our Opinion. Neither wou'd it prove, in the least, Irreconcilable with what we have said, if the Horizontal Moon shou'd chance sometimes to seem enlarged beyond its usual Extent, even in more

Serene Weather. For we must not only have regard to the Mist, which happens to be in the place where we stand; we ought also to take into our Thoughts, the whole Sum of Vapours and Exhalations, which lie betwixt the Eye and the Moon: All which cooperating to render the Appearance of the Moon more Faint, and thereby increase its Magnitude, it may chance to appear greater than it usually does, even in the Horizontal Position, at a time when, though there be no extraordinary Fog or Haziness, just in the place where we stand; yet, the Air between the Eye and the Moon, taken altogether, may be loaded with a greater quantity of interspersed Vapours and Exhalations, than at other times.

LXXII. It may be objected, that in Consequence of our Principles, the Interposition of a Body in some degree Opaque, which may intercept a great Part of the Rays of Light, shou'd render the Appearance of the Moon in the Meridian as large, as when it is viewed in the Horizon. To which I answer, it is not Faintness any how applied, that suggests greater Magnitude, there being no necessary, but only an experimental Connexion between those two things: It follows, that the Faintness, which enlarges the Appearance, must be applied in such Sort, and with such Circumstances, as have been observed to attend the Vision of great Magnitudes. When from a Distance we behold great Objects, the Particles of the intermediate Air and Vapours, which are themselves unperceivable, do interrupt the Rays of Light, and thereby render the Appearance less strong and vivid; now, Faintness of Appearance caused in this Sort, hath been experienced to coexist with great Magnitude. But when it is caused by the Interposition of an opaque sensible Body, this Circumstance

cumstance alters the Case, so that a faint Appearance this way caused, doth not suggest greater Magnitude, because it hath not been experienced to coexist with it.

LXXIII. Faintness, as well as all other Ideas or Perceptions which suggest Magnitude or Distance, doth it in the same way that Words suggest the Notions to which they are annexed. Now it is known, a Word pronounced with certain Circumstances, or in a certain Context with other Words, hath not always the same Import and Signification that it hath when pronounced in some other Circumstances, or different Context of Words. The very same visible Appearance as to Faintness and all other respects, if placed on high, shall not suggest the same Magnitude that it would if it were seen at an equal Distance, on a level with the Eye. The Reason whereof is, that we are rarely accustomed to view Objects at a great Height; our Concerns lie among things situated rather before than above us; and accordingly our Eyes are not placed on the top of our Heads, but in such a Position, as is most convenient for us to see distant Objects standing in our way, and this Situation of them being a Circumstance, which usually attends the Vision of distant Objects, we may from hence account for (what is commonly observed) an Object's appearing of different Magnitude, even with respect to its Horizontal Extension, on the top of a Steeple, for example, an hundred Feet high to one standing below, from what it would if placed at an hundred Feet distance on a level with his Eye. For it hath been shewn, that the Judgment we make on the Magnitude of a thing, depends not on the visible Appearance alone, but also on divers other Circumstances, any one of which being omitted or varied may suffice to make some alteration in
our

our Judgment. Hence, the Circumstance of viewing a distant object in such a Situation as is usual, and suits with the ordinary Posture of the Head and Eyes being omitted, and instead thereof a different Situation of the Object, which requires a different Posture of the Head taking place, it is not to be wondered at, if the Magnitude be judged different; but it will be demanded, why an high Object shoul'd constantly appear less than an equidistant low Object of the same Dimensions, for so it is observed to be; it may indeed be granted that the variation of some Circumstances may vary the Judgment, made on the Magnitude of High Objects, which we are less used to look at: But it does not hence appear, why they shoul'd be judged less rather than greater? I answer, that in case the Magnitude of distant Objects was suggested by the Extent of their visible Appearance alone, and thought Proportional thereto, it is certain they wou'd then be judged much less than now they seem to be, *Vide* SECT. LXXIX. But several Circumstances concurring to form the Judgment we make on the Magnitude of distant Objects, by means of which they appear far larger than others, whose visible Appearance hath an equal or even greater Extension; it follows, that upon the Change or Omission of any of those Circumstances, which are wont to attend the Vision of distant Objects, and so come to influence the Judgments made on their Magnitude, they shall proportionably appear less than otherwise they would. For any of those things that caused an Object to be thought greater, than in proportion to its visible Extension, being either omitted or applied without the usual Circumstances, the Judgment depends more intirely on the visible Extension, and consequently the Object must be judged less. Thus in the present Case, the Situation of the thing seen being different

ferent from what it usually is in those Objects we have occasion to view, and whose Magnitude we observe, it follows, that the very same Object, being an hundred Feet high, shou'd seem less than if it was an hundred Feet off on (or nearly on) a level with the Eye. What has been here set forth, seems to me to have no small share in contributing to magnify the Appearance of the horizontal Moon, and deserves not to be passed over in the Explication of it.

LXXIV. If we attentively consider the Phænomenon before us, we shall find the not discerning between the mediate and immediate Objects of Sight, to be the chief Cause of the Difficulty that occurs in the Explication of it. The Magnitude of the visible Moon, or that which is the proper and immediate Object of Vision, is no greater when the Moon is in the Horizon, than when it is in the Meridian. How comes it therefore, to seem greater in one Situation than the other? What is it can put this Cheat on the Understanding? It has no other Perception of the Moon, than what it gets by Sight: And that which is seen, is of the same Extent, I say, the visible Appearance hath the same, or rather a less Magnitude when the Moon is viewed in the Horizontal, than when in the Meridional Position: And yet it is esteemed greater in the former than in the latter. Herein consists the difficulty, which doth vanish and admit of a most easy Solution, if we consider that as the visible Moon is not greater in the Horizon than in the Meridian, so neither is it thought to be so. It hath been already shewn, that in any act of Vision, the visible Object absolutely, or in it self, is little taken notice of, the Mind still carrying its View from that to some tangible Ideas, which have been observed to be connected with it, and by that means come to

to be suggested by it. So that when a thing is said to appear great or small, or whatever Estimate be made of the Magnitude of any thing, this is meant not of the visible, but of the tangible Object. This duly considered, it will be no hard matter to reconcile the seeming Contradiction there is, that the Moon shou'd appear of a different Bigness, the visible Magnitude thereof remaining still the same. For by SECT. LVI. the very same visible Extension, with a different Faintness, shall suggest a different tangible Extension. When therefore the Horizontal Moon is said to appear greater than the Meridional Moon, this must be understood not of a greater visible Extension, but of a greater tangible or real Extension, which by reason of the more than ordinary Faintness of the visible Appearance, is suggested to the Mind along with it.

LXXXV. Many Attempts have been made by Learned Men, to account for this Appearance. *Gassendus*, *Descartes*, *Hobbes*, and several others, have employed their Thoughts on that Subject; but how fruitless and unsatisfactory their Endeavours have been, is sufficiently shewn in *The Philosophical Transactions**, where you may see their several Opinions at large set forth and confuted, not without some Surprise at the gross Blunders that ingenious Men have been forced into, by endeavouring to reconcile this Appearance with the ordinary Principles of Optics. Since the Writing of which, there hath been published in the Transactions† another Paper relating to the same Affair, by the celebrated Dr. *Wallis*, wherein he attempts to account for that Phænomenon, which, though it seems not to contain any thing new, or different from

* Phil. Transf. Num. 187. p. 314.

† Num. 187. p. 323.

what had been said before by others, I shall nevertheless consider in this place.

LXXVI. His Opinion, in short, is this; We judge not of the Magnitude of an Object by the visual Angle alone, but by the visual Angle in conjunction with the Distance. Hence, though the Angle remain the same, or even become less, yet if withal the Distance seem to have been increased, the Object shall appear greater. Now, one way whereby we estimate the Distance of any thing, is by the Number and Extent of the intermediate Objects: When therefore the Moon is seen in the Horizon, the Variety of Fields, Houses, &c. together with the large Prospect of the wide extended Land or Sea, that lies between the Eye and the utmost Limb of the Horizon, suggest unto the Mind the Idea of greater Distance, and consequently magnify the Appearance. And this, according to Dr. *Wallis*, is the true Account of the extraordinary Largeness attributed by the Mind to the Horizontal Moon, at a time when the Angle subtended by its Diameter, is not one jot greater than it used to be.

LXXVII. With reference to this Opinion, not to repeat what hath been already said concerning Distance, I shall only observe, *First*, That if the Prospect of interjacent Objects be that which suggests the Idea of farther Distance, and this Idea of farther Distance be the Cause that brings into the Mind the Idea of greater Magnitude, it shou'd hence follow, that if one looked at the Horizontal Moon from behind a Wall, it would appear no bigger than ordinary. For in that Case, the Wall interposing cuts off all that Prospect of Sea and Land, &c. which might otherwise increase the apparent Distance, and thereby the apparent Magnitude

tude of the Moon. Nor will it suffice to say, the Memory doth even then suggest all that Extent of Land, &c. which lies within the Horizon; which Suggestion occasions a sudden Judgment of Sense, that the Moon is farther off and larger than usual. For ask any Man, who from such a Station beholding the Horizontal Moon, shall think her greater than usual, whether he hath at that time in his Mind any Idea of the intermediate Objects, or long Tract of Land that lies between his Eye and the extreme Edge of the Horizon? And whether it be that Idea which is the Cause of his making the aforementioned Judgment? He will, I suppose, reply in the Negative, and declare the Horizontal Moon shall appear greater than the Meridional, though he never thinks of all or any of those things that lie between him and it. *Secondly*, It seems impossible by this Hypothesis, to account for the Moon's appearing in the very same Situation, at one time greater than at another; which nevertheless has been shewn to be very agreeable to the Principles we have laid down, and receives a most easy and natural Explication from them. For the further clearing up of this Point, it is to be observed that what we immediately and properly see are only Lights and Colours in sundry Situations and Shades, and Degrees of Faintness and Clearness, Confusion and Distinctness. All which visible Objects are only in the Mind; nor do they suggest ought external, whether Distance or Magnitude, otherwise than by habitual Connexion as Words do Things. We are also to remark, that, beside the Straining of the Eyes, and beside the vivid and faint, the distinct and confused Appearances (which bearing some Proportion to Lines and Angles, have been substituted instead of them, in the foregoing Part of this Treatise) there are other means which suggest both Distance and Magnitude;

nitude; particularly, the Situation of visible Points, or Objects, as upper or lower; the former suggesting a farther Distance and greater Magnitude, the latter a nearer Distance and lesser Magnitude: All which is an Effect only of Custom and Experience; there being really nothing intermediate in the Line of Distance, between the Uppermost and Lowermost, which are both *Æquidistant*, or rather at no Distance from the Eye, as there is also nothing in Upper or Lower, which by necessary Connexion shou'd suggest greater or lesser Magnitude. Now, as these customary, experimental means of suggesting Distance, do likewise suggest Magnitude, so they suggest the one as immediately as the other. I say, they do not (*Vide* SECT. LIII.) first suggest Distance, and then leave the Mind from thence to infer or compute Magnitude, but suggest Magnitude as immediately and directly as they suggest Distance.

LXXVIII. This Phænomenon of the Horizontal Moon is a clear Instance of the insufficiency of Lines and Angles, for explaining the way wherein the Mind perceives, and estimates the Magnitude of outward Objects. There is nevertheless a use of Computation by them, in order to determine the apparent Magnitude of things, so far as they have a Connexion with, and are proportional to those other Ideas, or Perceptions which are the true and immediate Occasions that suggest to the Mind the apparent Magnitude of Things. But this in general may, I think, be observed concerning Mathematical Computation in Optics: That it can never be very precise and exact, since the Judgments we make of the Magnitude of External Things do often depend on several Circumstances, which are not proportionable to, or capable of being defined by Lines and Angles.

LXXIX.

LXXIX. From what has been said, we may safely deduce this Consequence, to wit, that a Man born blind, and made to see, wou'd, at first opening of his Eyes make a very different Judgment of the Magnitude of Objects intromitted by them, from what others do. He wou'd not consider the Ideas of Sight, with reference to, or as having any Connexion with the Ideas of Touch: His View of them being intirely terminated within themselves, he can no otherwise judge them Great or Small, than as they contain a greater or lesser Number of visible Points. Now, it being certain that any visible Point can cover or exclude from View, only one other visible Point, it follows, that whatever Object intercepts the View of another, hath an equal Number of visible Points with it; and consequently they shall both be thought by him to have the same Magnitude. Hence it is evident, one in those Circumstances would judge his Thumb, with which he might hide a Tower, or hinder its being seen, equal to that Tower, or his Hand, the Interposition whereof might conceal the Firmament from his View, equal to the Firmament: How great an Inequality soever there may, in our Apprehensions, seem to be betwixt those two things, because of the customary and close Connexion that has grown up in our Minds between the Objects of Sight and Touch, whereby the very different and distinct Ideas of those two Senses, are so blended and confounded together, as to be mistaken for one and the same thing; out of which Prejudice we cannot easily extricate ourselves.

LXXX. For the better explaining the Nature of Vision, and setting the manner wherein we perceive Magnitudes in a due Light, I shall proceed
to

to make some Observations concerning Matters relating thereto, whereof the want of Reflexion, and duly separating between tangible and visible Ideas, is apt to create in us mistaken and confused Notions. And *First*, I shall observe that the *Minimum Visibile* is exactly equal in all Beings whatsoever, that are endowed with the visive Faculty. No exquisite Formation of the Eye, no peculiar Sharpness of Sight can make it less in one Creature than in another; for it not being distinguishable into Parts, nor in any wise consisting of them, it must necessarily be the same to all. For suppose it otherwise, and that the *Minimum Visibile* of a Mite, for Instance, be less than the *Minimum Visibile* of a Man; the latter therefore may by Detraction of some part be made equal to the former: It doth therefore consist of Parts, which is inconsistent with the Notion of a *Minimum Visibile*, or Point.

LXXXI. It will perhaps be objected that the *Minimum Visibile* of a Man doth really, and in it self contain Parts whereby it surpasses that of a Mite, though they are not perceivable by the Man. To which I answer, the *Minimum Visibile* having (in like manner as all other the proper and immediate Objects of Sight) been shewn not to have any Existence without the Mind of him who sees it, it follows there cannot be any part of it that is not actually perceived, and therefore visible. Now for any Object to contain several distinct visible Parts, and at the same time to be a *Minimum Visibile*, is a manifest Contradiction.

LXXXII. Of these visible Points we see at all times an equal Number. It is every whit as great when our View is contracted and bounded by near Objects, as when it is extended to larger and re-

moter. For it being impossible that one *Minimum Visibile* should obscure, or keep out of Sight more than one other, it is a plain Consequence, that when my View is on all sides bounded by the Walls of my Study, I see just as many visible points as I cou'd, in case that by the removal of the Study-walls, and all other Obstructions, I had a full Prospect of the circumjacent Fields, Mountains, Sea, and open Firmament; for so long as I am shut up within the Walls, by their Interposition, every Point of the external Objects is covered from my View: But each Point that is seen being able to cover or exclude from Sight, one only other corresponding Point, it follows, that whilst my Sight is confined to those narrow Walls, I see as many Points, or *Minima Visibilia*, as I should were those Walls away, by looking on all the external Objects, whose Prospect is intercepted by them. Whenever therefore we are said to have a greater Prospect at one time than another, this must be understood with relation not to the proper and immediate, but the secondary and mediate Objects of Vision, which, as hath been shewn, properly belong to the Touch.

LXXXIII. The visive Faculty considered, with reference to its immediate Objects, may be found to labour of two Defects, *First*, In respect of the Extent or Number of visible Points that are at once perceivable by it, which is narrow and limited to a certain Degree. It can take in at one View but a certain determinate Number of *Minima Visibilia*, beyond which it cannot extend its Prospect. *Secondly*, Our Sight is defective in that its View is not only narrow, but also for the most part confus'd; of those things that we take in at one Prospect, we can see but a few at once clearly and unconfus'dly; and the more we fix our Sight
on

on any one Object, by so much the Darker and more Indistinct shall the rest appear.

LXXXIV. Corresponding to these two Defects of Sight, we may imagine as many Perfections, to wit, *1st*. That of comprehending in one View a greater Number of visible Points. *2^{dly}*. Of being able to view them all equally and at once, with the utmost Clearness and Distinction. That those Perfections are not actually in some Intelligences of a different Order and Capacity from ours, it is impossible for us to know.

LXXXV. In neither of those two Ways do Microscopes contribute to the improvement of Sight; for when we look through a Microscope, we neither see more visible Points, nor are the collateral Points more distinct than when we look with the naked Eye, at Objects placed in a due Distance. A Microscope brings us as it were into a new World: It presents us with a new Scene of visible Objects, quite different from what we behold with the naked Eye. But herein consists the most remarkable Difference, to wit, that whereas the Objects perceived by the Eye alone, have a certain Connexion with tangible Objects, whereby we are taught to foresee what will ensue upon the Approach or Application of distant Objects to the Parts of our own Body, which much conduceth to its Preservation; there is not the like Connexion between things tangible and those visible Objects, that are perceived by help of a fine Microscope.

LXXXVI. Hence it is evident, that were our Eyes turned into the Nature of Microscopes, we shou'd not be much benefited by the Change; we shou'd be deprived of the forementioned Advan-

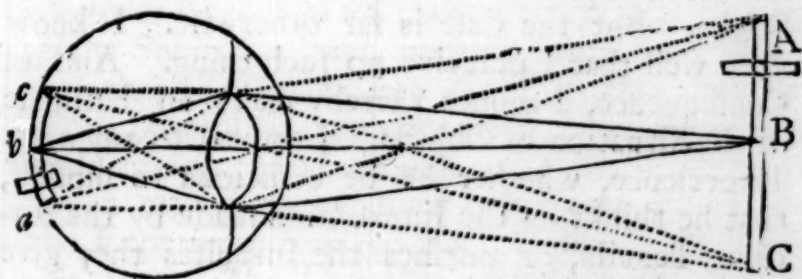
tage we at present receive by the visive Faculty ; and have left us only the empty Amusement of Seeing, without any other benefit arising from it. But in that Case, it will perhaps be said, our Sight wou'd be endued with a far greater Sharpness and Penetration than it now hath. But I wou'd fain know wherein consists that Sharpness, which is esteemed so great an Excellency of Sight. It is certain from what we have already shewn, that the *Minimum Visibile* is never greater or lesser, but in all Cases constantly the same : And in the Case of Microscopical Eyes, I see only this Difference, to wit, that upon the ceasing of a certain observable Connexion betwixt the divers Perceptions of Sight and Touch, which before enabled us to regulate our Actions by the Eye, it wou'd now be rendered utterly unserviceable to that Purpose.

LXXXVII. Upon the whole, it seems that if we consider the Use and End of Sight, together with the present State and Circumstances of our Being, we shall not find any great Cause to complain of any Defect or Imperfection in it, or easily conceive how it cou'd be mended. With such admirable Wisdom is that Faculty contrived, both for the Pleasure and Convenience of Life.

LXXXVIII. Having finished what I intended to say, concerning the Distance and Magnitude of Objects, I come now to treat of the Manner, wherein the Mind perceives by Sight their Situation. Among the Discoveries of the last Age, it is reputed none of the least, that the Manner of Vision hath been more clearly explained, than ever it had been before. There is, at this Day, no one Ignorant, that the Pictures of external Objects are painted on the *Retina*, or Fund of the Eye. That we can see nothing which is not so painted : And
that,

that, according as the Picture is more Distinct or Confused, so also is the Perception we have of the Object: But then in this Explication of Vision, there occurs one mighty Difficulty. The Objects are painted in an inverted Order on the Bottom of the Eye: The upper part of any Object being painted on the lower part of the Eye, and the lower part of the Object on the upper part of the Eye: And so also as to Right and Left, Since therefore the Pictures are thus inverted, it is demanded how it comes to pass, that we see the Objects erect and in their natural Posture?

LXXXIX. In answer to this Difficulty, we are told, that the Mind perceiving an Impulse of a Ray of Light, on the upper part of the Eye, considers this Ray as coming in a direct Line, from the lower part of the Object; and in like manner tracing the Ray that strikes on the lower part of the Eye, it is directed to the upper part of the Object. Thus in the adjacent Figure C the lower Point of the Object A B C is projected on *c* the upper part of the Eye, So likewise, the highest



Point A is projected on *a* the lowest part of the Eye, which makes the Representation *c b a* inverted: But the Mind considering the Stroke that is made on *c* as coming in the straight Line Cc from the lower end of the Object; and the Stroke or Impulse on *a*, as coming in the Line

Aa from the upper End of the Object, is directed to make a right Judgment of the Situation of the Object *ABC*, notwithstanding the Picture of it is inverted. This is illustrated by conceiving a blind Man, who holding in his Hands two Sticks that cross each other, doth with them touch the extremities of an Object, placed in a perpendicular Situation. It is certain, this Man will judge that to be the upper part of the Object, which he touches with the Stick held in the undermost Hand, and that to be the lower part of the Object, which he touches with the Stick in his uppermost Hand. This is the common Explication of the erect Appearance of Objects, which is generally received and acquiesced in, being (as Mr. *Molyneux* tells us*) *allowed by all Men as Satisfactory.*

XC. But this account to me does not seem in any degree True. Did I perceive those Impulses, Decussations, and Directions of the Rays of Light, in like manner as hath been set forth, then, indeed, it wou'd not at first view be altogether void of Probability. And there might be some Pretence for the Comparison of the Blind-Man and his cross Sticks. But the Case is far otherwife. I know very well that I perceive no such thing. And of Consequence, I cannot thereby make an Estimate of the Situation of Objects. I appeal to any one's Experience, whether he be conscious to himself, that he thinks on the Interfection made by the Radious Pencils, or pursues the Impulses they give in right Lines, whenever he perceives by Sight the Position of any Object? To me it seems evident, that Crossing and Tracing of the Rays, is never thought on by Children, Idiots, or in truth by any other, save only those who have applied

* *Dioptr. par. 2. c. 7. p. 289.*

themselves to the Study of Optics. And for the Mind to judge of the Situation of Objects by those things, without perceiving them, or to perceive them without knowing it, is equally beyond my Comprehension. Add to this, that the explaining the manner of Vision by the Example of cross Sticks, and hunting for the Object along the Axes of the Radium Pencils, doth suppose the proper Objects of Sight to be perceived at a Distance from us, contrary to what hath been demonstrated.

XCI. It remains, therefore, that we look for some other Explication of this Difficulty: And I believe it not impossible to find one, provided we examine it to the Bottom, and carefully distinguish between the Ideas of Sight and Touch; which cannot be too oft inculcated in treating of Vision: But more especially throughout the consideration of this Affair, we ought to carry that Distinction in our Thoughts: For that from want of a right Understanding thereof, the Difficulty of explaining Erect Vision seems chiefly to arise.

XCII. In order to disentangle our Minds, from whatever Prejudices we may entertain with relation to the Subject in hand, nothing seems more apposite, than the taking into our Thoughts the Case of one born Blind, and afterwards, when grown up, made to see. And though perhaps, it may not be an easy Task to divest our selves intirely of the Experience received from Sight, so as to be able to put our Thoughts exactly in the Posture of such a one's; we must, nevertheless as far as possible, endeavour to frame true Conceptions, of what might reasonably be supposed to pass in his Mind.

XCIII. It is certain, that a Man actually Blind, and who had continued so from his Birth, wou'd by the Sense of Feeling attain to have Ideas of Upper and Lower. By the Motion of his Hand he might discern the Situation of any Tangible Object placed within his Reach. That part on which he felt himself supported, or towards which he perceived his Body to gravitate, he wou'd term Lower, and the contrary to this Upper; and accordingly denominate whatsoever Objects he touch'd.

XCIV. But then, whatever Judgments he makes concerning the Situation of Objects, are confined to those only that are perceivable by Touch. All those things that are Intangible, and of a spiritual Nature, his Thoughts and Desires, his Passions, and in general all the Modifications of his Soul, to these he wou'd never apply the Terms Upper and Lower, except only in a Metaphorical Sense. He may, perhaps, by way of Allusion, speak of high or low Thoughts: But those Terms in their proper Signification, wou'd never be applyed to any thing, that was not conceived to exist without the Mind. For a Man born Blind, and remaining in the same State, could mean nothing else by the Words Higher and Lower, than a greater or lesser Distance from the Earth: Which Distance he wou'd measure by the Motion or Application of his Hand, or some other part of his Body. It is, therefore, evident, that all those things which, in respect of each other, wou'd by him be thought Higher or Lower, must be such as were conceived to exist without his Mind, in the ambient Space.

XCV. Whence it plainly follows, that such a one, if we suppose him made to see, wou'd not at
first

first Sight think, that any thing he saw was High or Low, Erect or Inverted; for it hath been already demonstrated in SECT. XLI. that he wou'd not think the Things he perceived by Sight to be at any Distance from him, or without his Mind. The Objects to which he had hitherto been used to apply the Terms Up and Down, High and Low, were such only as affected, or were some way perceived by his Touch; But the proper Objects of Vision make a new Set of Ideas, perfectly distinct and different from the former, and which can in no sort make themselves perceived by Touch. There is, therefore, nothing at all that cou'd induce him to think those Terms applicable to them: Nor wou'd he ever think it, till such time as he had observed their Connexion with Tangible Objects, and the same Prejudices began to insinuate it self into his Understanding, which from their Infancy had grown up in the Understandings of other Men.

XCVI. To set this Matter in a clearer Light, I shall make use of an Example. Suppose the above-mentioned blind Person, by his Touch, perceives a Man to stand Erect. Let us inquire into the manner of this. By the application of his Hand to the several Parts of a Humane Body, he had perceived different Tangible Ideas, which being collected into sundry complex ones have distinct Names annexed to them. Thus one Combination of a certain Tangible Figure, Bulk, and Consistency of Parts is called the Head, another the Hand, a Third the Foot, and so of the rest: All which Complex Ideas cou'd, in his Understanding, be made up only of Ideas perceivable by Touch. He had also by his Touch obtained an Idea of Earth or Ground, towards which he perceives the Parts of his Body to have a natural Tendency. Now, by Erect nothing more being meant, than
that

that perpendicular Position of a Man, wherein his Feet are nearest to the Earth: If the blind Person by moving his Hand, over the Parts of the Man who stands before him, perceives the tangible Ideas that compose the Head, to be farthest from, and those that compose the Feet to be nearest to, that other Combination of Tangible Ideas which he calls Earth: He will denominate that Man Erect. But if we suppose him on a sudden to receive his Sight, and that he behold a Man standing before him, it is evident, in that Case, he wou'd neither judge the Man he sees to be Erect nor Inverted; for he never having known those Terms applied to any other, save Tangible Things, or which existed in the Space without him, and what he sees neither being Tangible, nor perceived as existing without, he cou'd not know that in propriety of Language they were applicable to it.

XCVII. Afterwards, when upon turning his Head or Eyes up and down to the right and left, he shall observe the visible Objects to change, and shall also attain to know, that they are called by the same Names, and connected with the Objects perceived by Touch; then, indeed, he will come to speak of them and their Situation, in the same Terms that he has been used to apply to Tangible Things: And those that he perceives by turning up his Eyes, he will call Upper, and those that by turning down his Eyes, he will call Lower.

XCVIII. And this seems to me the true Reason why he shou'd think those Objects uppermost that are painted on the Lower part of his Eye: For, by turning the Eye up they shall be distinctly seen; as likewise those that are painted on the highest part of the Eye shall be distinctly seen, by turning the Eye down, and are for that Reason
esteemed

esteemed lowest: For we have shewn that to the immediate Objects of Sight, considered in themselves, he wou'd not attribute the Terms High and Low. It must therefore be on account of some Circumstances, which are observed to attend them: And these, it is plain, are the Actions of turning the Eye up and down, which suggest a very obvious Reason, why the Mind shou'd denominate the Objects of Sight accordingly High or Low. And without this Motion of the Eye, this turning it up and down in order to discern different Objects, doubtless Erect, Inverse, and other the like Terms relating to the Position of Tangible Objects, wou'd never have been transferred, or in any degree apprehended to belong to the Ideas of Sight: The meer Act of Seeing including nothing in it to that Purpose; whereas the different Situations of the Eye naturally direct the Mind to make a suitable Judgment of the Situation of Objects intromitted by it.

XCIX. Farther, when he has by Experience learned the Connexion there is between the several Ideas of Sight and Touch, he will be able, by the Perception he has of the Situation of Visible Things in respect of one another, to make a sudden and true Estimate of the Situation of Outward, Tangible Things corresponding to them. And thus it is, he shall perceive by Sight the Situation of External Objects, which do not properly fall under that Sense.

C. I know we are very prone to think, that if just made to see, we shou'd judge of the Situation of Visible Things as we do now: But, we are also as prone to think, that at first Sight, we shou'd in the same way apprehend the Distance and Magnitude of Objects, as we do now; Which hath been shewn
to

to be a false and groundless Persuasion. And for the like Reasons, the same Censure may be past on the positive Assurance, that most Men, before they have thought sufficiently of the Matter, might have of their being able to determine by the Eye at first view, whether Objects were Erect or Inverse.

CI. It will, perhaps be objected to our Opinion, that a Man, for Instance, being thought Erect when his Feet are next the Earth, and Inverted when his Head is next the Earth, it doth hence follow, that by the meer act of Vision, without any Experience or altering the Situation of the Eye, we shou'd have determined whether he were Erect or Inverted: For both the Earth it self, and the Limbs of the Man who stands thereon, being equally perceived by Sight, one cannot choose seeing, what part of the Man is nearest the Earth, and what part farthest from it, *i. e.* whether he be Erect or Inverted.

CII. To which I answer, the Ideas which constitute the Tangible Earth and Man, are intirely different from those which constitute the Visible Earth and Man. Nor was it possible, by virtue of the Visive Faculty alone, without superadding any Experience of Touch, or altering the Position of the Eye, ever to have known, or so much as suspected, there had been any Relation or Connexion between them: Hence, a Man at first view wou'd not denominate any thing he saw Earth, or Head, or Foot; and consequently, he cou'd not tell by the meer act of Vision, whether the Head or Feet were nearest the Earth: Nor, indeed, wou'd we have thereby any thought of Earth or Man, Erect or Inverse, at all: Which will be made yet more evident, if we nicely observe, and
make

make a particular Comparifon between the Ideas of both Senfes.

CIII. That which I fee is only variety of Light and Colours. That which I feel is Hard or Soft, Hot or Cold, Rough or Smooth. What Similitude, what Connexion have thofe Ideas with thefe? Or how is it poffible, that any one fhould fee Reafon, to give one and the fame Name to Combinations of Ideas fo very different, before he had experienced their Coexiftence? We do not find there is any neceffary Connexion betwixt this or that Tangible Quality, and any Colour whatfoever. And we may fometimes perceive Colours, where there is nothing to be felt. All which doth make it manifeft, that no Man at firft receiving of his Sight, would know there was any Agreement between this or that particular Object of his Sight, and any Object of Touch he had been already acquainted with: The Colours therefore of the Head, would to him no more fuggelt the Idea of Head, than they would the Idea of Foot.

CIV. Farther, we have at large fhewn (vid. SECT. LXIII and LXIV.) there is no dicoverable, neceffary Connexion, between any given Vifible Magnitude, and any one particular Tangible Magnitude; but that it is intirely the refult of Custom and Experience, and depends on foreign and accidental Circumftances, that we can by the Perception of Vifible Extension inform our felves, what may be the Extension of any Tangible Object connected with it. Hence it is certain that neither the Vifible Magnitude of Head or Foot, would bring along with them into the Mind, at firft opening of the Eyes, the refpective Tangible Magnitudes of thofe Parts.

CV.

CV. By the foregoing Section, it is plain the Visible Figure of any Part of the Body hath no necessary Connexion with the Tangible Figure thereof, so as at First Sight to suggest it to the Mind: For Figure is the Termination of Magnitude, whence it follows, that no Visible Magnitude, having in its own Nature an aptness to suggest any one particular Tangible Magnitude, so neither can any Visible Figure be inseparably connected with its corresponding Tangible Figure: So as of it self and in a way prior to Experience, it might suggest it to the Understanding. This will be farther evident, if we consider that what seems smooth and round to the Touch, may to Sight, if viewed through a Microscope, seem quite otherwise.

CVI. From all which laid together and duly considered, we may clearly deduce this Inference. In the first act of Vision, no Idea entering by the Eye, wou'd have a perceivable Connexion with the Ideas to which the Names Earth, Man, Head, Foot, &c. were annexed in the Understanding of a Person Blind from his Birth; so as in any sort to introduce them into his Mind, or make themselves be called by the same Names, and reputed the same Things with them, as afterwards they come to be.

CVII. There doth, nevertheless, remain one Difficulty, which perhaps may seem to press hard on our Opinion, and deserve not to be passed over: For though it be granted that neither the Colour, Size, nor Figure of the visible Feet have any necessary Connexion with the Ideas that compose the Tangible Feet, so as to bring them at first sight into my Mind, or make me in danger of confounding them before I had been used to, and for some time experienced their Connexion: Yet thus much seems undeni-

undeniable, namely, that the Number of the visible Feet, being the same with that of the Tangible Feet, I may from hence without any Experience of Sight, reasonably conclude, that they represent or are connected with the Feet rather than the Head. I say, it seems the Idea of two visible Feet will sooner suggest to the Mind, the Idea of two tangible Feet than of one Head; so that the blind Man upon first Reception of the visive Faculty might know, which were the Feet or Two, and which the Head or One.

CVIII. In order to get clear of this seeming Difficulty, we need only observe, that Diversity of visible Objects doth not necessarily infer diversity of tangible Objects corresponding to them. A Picture painted with great variety of Colours affects the Touch in one uniform manner; it is therefore evident, that I do not by any necessary Consecution, independent of Experience, judge of the number of things Tangible, from the Number of things Visible. I shou'd not therefore at first opening my Eyes conclude, that because I see two I shall feel two. How, therefore can I, before Experience teaches me, know that the visible Legs, because two, are connected with the tangible Legs, or the visible Head, because one is connected with the tangible Head? The truth is, the things I see are so very different and heterogeneous from the things I feel, that the Perception of the one wou'd never have suggested the other to my thoughts, or enabled me to pass the least Judgment thereon, until I had experienced their Connexion.

CIX. But for a fuller Illustration of this Matter, it ought to be considered that Number (however some may reckon it amongst the Primary Qualities) is nothing fixed and settled, really existing in things
them-

themselves. It is intirely the Creature of the Mind, considering, either an Idea by it self, or any Combination of Ideas to which it gives one Name, and so makes it pass for an Unite. According as the Mind variously combines its Ideas, the Unite varies; and as the Unite, so the Number, which is only a Collection of Unites, doth also vary. We call a Window one, a Chimney one, and yet a House in which there are many Windows, and many Chimneys, hath an equal right to be called one, and many Houses go to the making of one City. In these and the like Instances, it is evident the *Unite* constantly relates to the particular Draughts the Mind makes of its Ideas, to which it affixes Names, and wherein it includes more or less, as best suits its own Ends and Purposes. Whatever therefore the Mind considers as one, that is an Unite. Every Combination of Ideas is considered as one thing by the Mind, and in token thereof is marked by one Name. Now, this Naming and Combining together of Ideas is perfectly arbitrary, and done by the Mind in such sort, as Experience shews it to be most convenient: Without which, our Ideas had never been collected into such sundry distinct Combinations as they now are.

CX. Hence it follows, that a Man born Blind, and afterwards, when grown up, made to see, wou'd not in the first act of Vision, parcel out the Ideas of Sight, into the same distinct Collections that others do, who have experienced which do regularly coexist and are proper to be bundled up together under one Name. He wou'd not, for Example, make into one complex Idea, and thereby esteem, and unite all those particular Ideas, which constitute the visible Head or Foot. For there can be no Reason assigned why he shou'd do so, barely upon his seeing a Man stand upright before him:

There

There croud into his Mind the Ideas which compose the visible Man, in company with all the other Ideas of Sight perceiv'd at the same time: But all these Ideas offer'd at once to his View, he wou'd not distribute into sundry distinct Combinations, till such time as by observing the Motion of the Parts of the Man and other Experiences, he comes to know, which are to be separated, and which to be collected together.

CXI. From what hath been premised, it is plain the Objects of Sight and Touch make, if I may so say, two Sets of Ideas, which are widely different from each other. To Objects of either kind, we indifferently attribute the Terms high and low, right and left, and such like, denoting the Position or Situation of things: But then we must well observe that the Position of any Object is determined with respect only to Objects of the same Sense. We say any Object of Touch is high or low, according as it is more or less distant from the tangible Earth: And in like manner we denominate any Object of Sight high or low, in Proportion as it is more or less distant from the visible Earth: But to define the Situation of visible Things, with relation to the Distance they bear from any tangible Thing, or *vice versa*, this were absurd and perfectly unintelligible. For all visible things are equally in the Mind, and take up no part of the external Space: And consequently are equidistant from any tangible thing, which exists without the Mind.

CXII. Or rather to speak truly, the proper Objects of Sight are at no Distance, neither near nor far from any tangible Thing. For if we inquire narrowly into the Matter we shall find that those things only are compared together in respect of Distance, which exist after the same manner, or

appertain unto the same Sense. For by the Distance between any two Points, nothing more is meant than the Number of intermediate Points: If the given Points are visible, the Distance between them is marked out by the Number of the interjacent visible Points: If they are tangible, the Distance between them is a Line consisting of tangible Points; but if they are one Tangible, and the other Visible, the Distance between them doth neither consist of Points perceivable by Sight nor by Touch; *i. e.* it is utterly inconceivable. This, perhaps, will not find an easy Admission into all Mens Understanding: However, I should gladly be informed whether it be not true, by any one who will be at the pains to reflect a little, and apply it home to his Thoughts.

CXIII. The not observing what has been delivered in the two last Sections, seems to have occasioned no small part of the Difficulty that occurs in the Business of Erect Appearances. The Head, which is painted nearest the Earth, seems to be farthest from it; and on the other hand, the Feet, which are painted farthest from the Earth, are thought nearest to it. Herein lies the Difficulty, which vanishes if we express the thing more clearly and free from Ambiguity, thus: How comes it that, to the Eye, the visible Head which is nearest the tangible Earth, seems farthest from the Earth, and the visible Feet, which are farthest from the tangible Earth, seem nearest the Earth? The Question being thus proposed, who sees not the Difficulty is founded on a Supposition, that the Eye, or visive Faculty, or rather the Soul by means thereof, shou'd judge of the Situation of visible Objects, with reference to their Distance from the tangible Earth? Whereas it is evident the tangible Earth is not perceived by Sight: And it hath been

been shewn in the two last preceding Sections, that the Location of Visible Objects is determined only by the Distance they bear from one another; and that it is Nonsense to talk of Distance, far or near, between a visible and tangible Thing.

CXIV. If we confine our Thoughts to the proper Objects of Sight, the whole is plain and easy. The Head is painted farthest from, and the Feet nearest to the visible Earth; and so they appear to be. What is there strange or unaccountable in this? Let us suppose the Pictures in the Fund of the Eye, to be the immediate Objects of the Sight. The Consequence is, that things shou'd appear in the same Posture they are painted in; and is it not so? The Head which is seen, seems farthest from the Earth which is seen; and the Feet, which are seen, seem nearest to the Earth which is seen; and just so they are painted.

CXV. But, say you, the Picture of the Man is inverted, and yet the Appearance is Erect: I ask, what mean you by the Picture of the Man, or, which is the same thing, the visible Man's being inverted? You tell me it is inverted, because the Heels are uppermost, and the Head undermost? Explain me this. You say, that by the Head's being undermost, you mean that it is nearest to the Earth; and by the Heels being uppermost, that they are farthest from the Earth. I ask again, what Earth you mean? You cannot mean the Earth that is painted on the Eye, or the visible Earth: For the Picture of the Head is farthest from the Picture of the Earth, and the Picture of the Feet nearest to the Picture of the Earth; and accordingly the visible Head is farthest from the visible Earth, and the visible Feet nearest to it. It remains, therefore, that you mean the tangible Earth, and so determine the Situation of visible things with respect to tangible Things; contrary to what

hath been demonstrated in SECT. CXI. and CXII. The two distinct Provinces of Sight and Touch shou'd be considered apart, and as if their Objects had no Intercourse, no manner of Relation to one another, in point of Distance or Position.

CXVI. Farther, what greatly contributes to make us mistake in this Matter is, that when we think of the Pictures in the Fund of the Eye, we imagine our selves looking on the Fund of another's Eye, or another looking on the Fund of our own Eye, and beholding the Pictures painted thereon. Suppose two Eyes A and B: A from some distance looking on the Pictures in B sees them inverted, and for that reason concludes they are inverted in B: But this is wrong. There are projected in little on the Bottom of A, the Images of the Pictures of, suppose Man, Earth, &c. which are painted on B. And besides these, the Eye B it self, and the Objects which environ it, together with another Earth, are projected in a larger Size on A. Now, by the Eye A, these larger Images are deemed the true Objects, and the lesser only Pictures in miniature. And it is with respect to those greater Images, that it determines the Situation of the smaller Images: So that comparing the little Man with the great Earth, A judges him inverted, or that the Feet are farthest from, and the Head nearest to the great Earth. Whereas, if A compare the little Man with the little Earth, then he will appear Erect, *i. e.* his Head shall seem farthest from, and his Feet nearest to the little Earth. But we must consider that B does not see two Earths as A does: It sees only what is represented by the little Pictures in A, and consequently shall judge the Man Erect: For, in truth, the Man in B is not inverted, for there the Feet are next the Earth; but it is the Representation of it in A which is inverted,
for

for there the Head of the Representation of the Picture of the Man in B is next the Earth, and the Feet farthest from the Earth, meaning the Earth which is without the Representation of the Pictures in B. For if you take the little Images of the Pictures in B, and consider them by themselves, and with respect only to one another, they are all Erect and in their natural Posture.

CXVII. Farther, there lies a Mistake in our imagining that the Pictures of external Objects are painted on the Bottom of the Eye. It hath been shewn, there is no resemblance between the Ideas of Sight, and things Tangible. It hath likewise been demonstrated, that the proper Objects of Sight do not exist without the Mind. Whence it clearly follows, that the Pictures painted on the Bottom of the Eye, are not the Pictures of external Objects. Let any one consult his own Thoughts, and then say what Affinity, what Likeness there is between that certain Variety and Disposition of Colours, which constitute the visible Man, or Picture of a Man, and that other Combination of far different Ideas, sensible by Touch, which compose the tangible Man. But if this be the Case, how come they to be accounted Pictures or Images, since that supposes them to copy or represent some Originals or other?

CXVIII. To which I answer: In the forementioned Instance, the Eye A takes the little Images, included within the Representation of the other Eye B, to be Pictures or Copies, whereof the Archetypes are not things existing without, but the larger Pictures projected on its own Fund: and which by A are not thought Pictures, but the Originals, or true Things themselves. Though if we suppose a third Eye C, from a due Distance to

behold the Fund of A, then indeed the Things projected thereon, shall, to C, seem Pictures or Images, in the same Sense that those projected on B do to A.

CXIX. Rightly to conceive this Point, we must carefully distinguish between the Ideas of Sight and Touch, between the visible and tangible Eye; for certainly on the tangible Eye, nothing either is or seems to be painted. Again, the visible Eye, as well as all other visible Objects, hath been shewn to exist only in the Mind, which perceiving its own Ideas, and comparing them together, calls some *Pictures* in respect of others. What hath been said, being rightly comprehended and laid together, doth, I think, afford a full and genuine Explication of the erect Appearance of Objects; which Phænomenon, I must confess, I do not see how it can be explained by any Theories of Vision hitherto made publick.

CXX. In treating of these things, the use of Language is apt to occasion some Obscurity and Confusion, and create in us wrong Ideas: For Language being accommodated to the Common Notions and Prejudices of Men, it is scarce possible to deliver the naked and precise Truth, without great Circumlocution, Impropriety, and (to an unwary Reader) seeming Contradictions; I do, therefore, once for all desire whoever shall think it worth his while to understand what I have written concerning Vision, that he would not stick in this or that Phrase, or manner of Expression, but candidly collect my Meaning from the whole Sum and Tenor of my Discourse, and laying aside the Words as much as possible, consider the bare Notions themselves, and then judge whether they are agreeable to Truth and his own Experience, or no.

CXXI.

CXXI. We have shewn the way wherein the Mind by mediation of visible Ideas doth perceive or apprehend the Distance, Magnitude, and Situation of tangible Objects. I come now to inquire more particularly concerning the Difference between the Ideas of Sight and Touch, which are call'd by the same Names, and see whether there be any Idea common to both Senses. From what we have at large set forth and demonstrated in the foregoing parts of this Treatise, it is plain there is no one self same numerical Extension, perceived both by Sight and Touch; but that the particular Figures and Extensions perceived by Sight, however they may be called by the same Names, and reputed the same Things, with those perceived by Touch, are nevertheless different, and have an Existence distinct and separate from them: So that the Question is not now concerning the same numerical Ideas, but whether there be any one and the same sort or Species of Ideas equally perceivable to both Senses? Or, in other Words, whether Extension, Figure, and Motion perceived by Sight, are not specifically distinct from Extension, Figure and Motion perceived by Touch?

CXXII. But before I come more particularly to discuss this Matter, I find it proper to consider Extension in Abstract: For of this there is much talk, and I apt to think, that when Men speak of Extension, as being an Idea common to Two Senses, it is with a secret Supposition, that we can single out Extension from all other tangible and visible Qualities, and form thereof an Abstract Idea, which Idea they will have common both to Sight and Touch. We are therefore to understand by Extension in Abstract, an Idea of Extension; for instance, a Line or Surface, intirely stript of all o-

ther sensible Qualities and Circumstances that might determine it to any particular Existence; it is neither black nor white, nor red, nor hath it any Colour at all, or any tangible Quality whatsoever, and consequently it is of no finite determinate Magnitude: For that which bounds or distinguishes one Extension from another, is some Quality or Circumstance wherein they disagree.

CXXIII. Now I do not find that I can perceive, imagine, or any wise frame in my Mind such an abstract Idea, as is here spoken of. A Line or Surface, which is neither black, nor white, nor blue, nor yellow, &c. nor long, nor short, nor rough, nor smooth, nor square, nor round, &c. is perfectly incomprehensible. This I am sure of as to my self; how far the Faculties of other Men may reach, they best can tell.

CXXIV. It is commonly said, that the Object of Geometry is abstract Extension; but Geometry contemplates Figures: Now, Figure is the Termination of Magnitude, but we have shewn that Extension in Abstract hath no finite determinate Magnitude, whence it clearly follows that it can have no Figure, and consequently is not the Object of Geometry. It is indeed a Tenet as well of the modern as of the ancient Philosophers, that all general Truths are concerning universal abstract Ideas; without which, we are told, there could be no Science, no Demonstration of any general Proposition in Geometry. But it were no hard matter, did I think it necessary to my present Purpose, to shew that Propositions and Demonstrations in Geometry might be Universal, though they who make them, never think of abstract general Ideas of Triangles or Circles.

CXXV.

CXXXV. After reiterated endeavours to apprehend the general Idea of a Triangle, I have found it altogether incomprehensible. And surely if any one were able to introduce that Idea into my Mind, it must be the Author of the *Essay concerning Humane Understanding*; He, who has so far distinguished himself from the generality of Writers, by the Clearness and Significancy of what he says. Let us therefore see how this celebrated Author describes the general, or abstract Idea of a Triangle. 'It must be (says he) neither Oblique, nor Rectangular, neither Equilateral, Equicrural, nor Scalenum; but all and none of these at once. In effect it is somewhat imperfect that cannot exist; an Idea, wherein some Parts of several different and inconsistent Ideas are put together'. *Essay on Hum. Understanding. B. iv. C. 7. S. 9.* This is the Idea, which he thinks needful, for the Enlargement of Knowledge, which is the Subject of Mathematical Demonstration, and without which we could never come to know any general Proposition concerning Triangles. That Author acknowledges it doth 'require some Pains and Skill to form this general Idea of a Triangle.' *Ibid.* But had he called to mind what he says in another place, to wit, 'That Ideas of mixed Modes wherein any inconsistent Ideas are put together, cannot so much as exist in the Mind, *i. e.* be conceived'. *Vid. B. iii. C. 10. S. 33. Ibid.* I say, had this occurred to his Thoughts, it is not improbable he would have owed it above all the Pains and Skill he was master of, to form the above-mentioned Idea of a Triangle, which is made up of manifest, staring Contradictions. That a Man who thought so much, and laid so great a stress on clear and determinate Ideas, shou'd nevertheless talk at this rate, seems very surprising. But the wonder will lessen

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lessen if it be considered, that the Source whence this Opinion flows, is the prolific Womb which has brought forth innumerable Errors and Difficulties, in all parts of Philosophy, and in all the Sciences: But this Matter, taken in its full Extent, were a Subject too vast and comprehensive to be insisted on in this place. And so much for Extension in Abstract.

CXXVI. some, perhaps, may think pure Space, *Vacuum*, or Trine Dimension to be equally the Object of Sight and Touch: But though we have a very great Propension, to think the Ideas of Outness and Space to be the immediate Object of Sight; yet if I mistake not, in the foregoing Parts of this Essay, That hath been clearly demonstrated to be a meer Delusion, arising from the quick and sudden suggestion of Fancy, which so closely connects the Idea of Distance with those of Sight, that we are apt to think it is it self a proper and immediate Object of that Sense, till Reason corrects the Mistake.

CXXVII. It having been shewn, that there are no Abstract Ideas of Figure, and that it is impossible for us, by any Precision of Thought, to frame an Idea of Extension separate from all other Visible and Tangible Qualities, which shall be common both to Sight and Touch: The Question now remaining is, whether the particular Extensions, Figures and Motions perceived by Sight be of the same kind, with the particular Extensions, Figures, and Motions perceived by Touch? In answer to which, I shall venture to lay down the following Proposition: *The Extension, Figures, and Motions, perceived by Sight are specifically distinct from the Ideas of Touch, called by the same Names, nor is there any such thing as one Idea, or kind of Idea common to both*

both Senses. This Proposition may, without much Difficulty, be collected from what hath been said in several Places of this Essay. But, because it seems so remote from, and contrary to, the received Notions and settled Opinion of Mankind, I shall attempt to demonstrate it more particularly, and at large, by the following Arguments.

CXXVIII. When upon Perception of an Idea, I range it under this or that sort; it is because it is perceived after the same manner, or because it has a Likeness or Conformity with, or affects me in the same way as the Ideas of the sort I rank it under. In short, it must not be intirely new, but have something in it Old, and already perceived by me: It must, I say, have so much, at least, in common with the Ideas I have before known and named, as to make me give it the same Name with them. But it has been, if I mistake not, clearly made out, that a Man born Blind wou'd not at first reception of his Sight, think the Things he saw were of the same Nature with the Objects of Touch, or had any thing in common with them; but that they were a new Set of Ideas, perceived in a new manner, and intirely different from all he had ever perceived before: So that he wou'd not call them by the same Name, nor repute them to be of the same Sort, with any thing he had hitherto known.

CXXIX. *Secondly,* Light and Colours are allowed by all to constitute a sort or Species intirely different from the Ideas of Touch: Nor will any Man, I presume, say they can make themselves perceived by that Sense: But there is no other immediate Object of Sight, besides Light and Colours. It is therefore a direct Consequence, that there is no Idea common to both Senses.

CXXX.

CXXX. It is a prevailing Opinion, even amongst those who have thought and writ most accurately concerning our Ideas, and the Ways whereby they enter into the Understanding, that something more is perceived by Sight, than barely Light and Colours with their Variations. Mr. *Locke* termeth Sight, 'The most Comprehensive of all our Senses, conveying to our Minds the Ideas of Light and Colours, which are peculiar only to that Sense; and also the far different Ideas of Space, Figure and Motion.' *Essay on Human Understand.* B. ii. C. 9. S. 9. Space or Distance, we have shewn is no otherwise the Object of Sight than of Hearing. *vid.* SECT. XLVI. And as for Figure and Extension, I leave it to any one, that shall calmly attend to his own clear and distinct Ideas, to decide whether he has any Idea introduced immediately and properly by Sight, save only Light and Colours: Or whether it be possible for him, to frame in his Mind a distinct Abstract Idea of Visible Extension, or Figure, exclusive of all Colour; and on the other hand, whether he can conceive Colour without Visible Extension? For my own part, I must confess, I am not able to attain so great a nicety of Abstraction; in a strict Sense, I see nothing but Light and Colours, with their several Shades and Variations. He who beside these doth also perceive by Sight Ideas far different and distinct from them, hath that Faculty in a degree more perfect and comprehensive than I can pretend to. It must be owned, that by the mediation of Light and Colours, other far different Ideas are suggested to my Mind: but so they are by Hearing, which beside Sounds which are peculiar to that Sense, doth by their mediation suggest not only Space, Figure and Motion, but also all other Ideas whatsoever that can be signified by Words.

CXXXI.

CXXXI. *Thirdly*, It is, I think, an Axiom universally received, that Quantities of the same kind may be added together, and make one intire Sum. Mathematicians add Lines together; but they do not add a Line to a Solid, or conceive it as making one Sum with a Surface: These three kinds of Quantity being thought incapable of any such mutual Addition, and consequently of being compared together, in the several ways of Proportion, are by them esteemed intirely Disparate and Heterogeneous. Now let any one try in his Thoughts to add a Visible Line or Surface to a Tangible Line or Surface, so as to conceive them making one continued Sum or Whole. He that can do this, may think them Homogeneous; but he that cannot must, by the foregoing Axiom, think them Heterogeneous: A Blue, and a Red Line I can conceive added together into one Sum, and making one continued Line; but to make, in my Thoughts, one continued Line of a Visible and Tangible Line added together is, I find, a Task far more difficult, and even insurmountable; and I leave it to the Reflexion and Experience of every particular Person to determine for himself.

CXXXII. A farther Confirmation of our Tenet may be drawn from the Solution of Mr. *Molyneux's* Problem, published by Mr. *Locke* in his Essay: Which I shall set down as it there lies, together with Mr. *Locke's* Opinion of it, '*Suppose a Man born Blind, and now Adult, and taught by his Touch to distinguish between a Cube, and a Sphere of the same Metal, and nighly of the same Bigness, so as to tell, when he felt one and t'other, which is the Cube, and which the Sphere. Suppose then the Cube and Sphere placed on a Table, and the blind Man to be made to See: Quære, Whether by his Sight,*

' Sight, before he touch'd them, he could now distin-
 ' guish, and tell, which is the Globe, which the Cube.
 ' To which the acute and judicious Proposer an-
 ' swers: Not. For though he has obtained the Ex-
 ' perience of, how a Globe, how a Cube affects his
 ' Touch; yet he has not yet attained the Experience,
 ' that what affects his Touch so or so, must affect his
 ' Sight so or so: Or that a protuberant Angle in the
 ' Cube, that pressed his Hand unequally, shall appear
 ' to his Eye, as it doth in the Cube. I agree with
 ' this thinking Gentleman, whom I am proud to
 ' call my Friend, in his Answer to this his Prob-
 ' lem; and am of opinion, that the blind Man, at
 ' first Sight would not be able with certainty to
 ' say, which was the Globe, which the Cube,
 ' whilst he only saw them.' *Essay on Human Under-
 standing.* B. ii. C. 9. S. 8.

CXXXIII. Now, if a Square Surface perceived
 by Touch be of the same sort with a Square Sur-
 face perceived by Sight; it is certain the blind
 Man here mentioned might know a Square Sur-
 face, as soon as he saw it: It is no more but in-
 troduced into his Mind, by a new Inlet, an Idea
 he has been already well acquainted with. Since
 therefore he is supposed to have known by his
 Touch, that a Cube is a Body terminated by
 Square Surfaces; and that a Sphere is not termi-
 nated by Square Surfaces: upon the supposition
 that a Visible and Tangible Square differ only *in
 numero*, it follows, that he might know, by the
 unerring mark of the Square Surfaces, which was
 the Cube, and which not, while he only saw them.
 We must therefore allow, either that Visible Ex-
 tension and Figures are specifically distinct from
 Tangible Extension and Figures, or else, that the
 Solution of this Problem, given by those two
 thoughtful and ingenious Men, is wrong.

CXXXIV.

CXXXIV. Much more might be laid together in Proof of the Proposition I have advanced: But what has been said is, if I mistake not, sufficient to convince any one that shall yield a reasonable Attention: And, as for those that will not be at the pains of a little Thought, no Multiplication of Words will ever suffice to make them understand the Truth, or rightly conceive my Meaning.

CXXXV. I cannot let go the above-mentioned Problem without some Reflexion on it. It hath been made evident, that a Man blind from his Birth wou'd not, at first Sight, denominate any thing he saw, by the Names he had been used to appropriate to Ideas of Touch, *vid.* SECT. CVI. Cube, Sphere, Table, are Words he has known applied to Things perceivable by Touch, but to Things perfectly Intangible he never knew them applied. Those Words in their wonted application, always marked out to his Mind Bodies, or solid Things which were perceived by the Resistance they gave: But there is no Solidity, no Resistance or Protrusion perceived by Sight. In short, the Ideas of Sight are all new Perceptions, to which there be no Names annexed in his Mind; he cannot therefore understand what is said to him concerning them: And to ask of the two Bodies he saw placed on the Table, which was the Sphere, which the Cube, were, to him, a Question downright bantering and unintelligible; nothing he sees being able to suggest to his Thoughts, the Idea of Body, Distance, or in general, of any thing he had already known.

CXXXVI. It is a mistake, to think the same thing affects both Sight and Touch. If the same Angle or Square, which is the Object of Touch, be also the Object of Vision, what shou'd hinder the
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the blind Man, at first Sight, from knowing it? For though the Manner wherein it affects the Sight, be different from that wherein it affected his Touch; yet, there being, beside this Manner or Circumstance, which is new and unknown, the Angle or Figure, which is old and known, he cannot choose but discern it.

CXXXVII. Visible Figure and Extension having been demonstrated to be of a nature, intirely different and heterogeneous from tangible Figure and Extension, it remains that we inquire concerning Motion. Now that visible Motion is not of the same sort with tangible Motion, seems to need no farther Proof, it being an evident Corollary from what we have shewn concerning the Difference there is between visible and tangible Extension: But for a more full and exprefs Proof hereof, we need only observe, that one who had not yet experienced Vision, wou'd not at first sight know Motion. Whence it clearly follows, that Motion perceivable by Sight is of a sort distinct from Motion perceivable by Touch. The Antecedent I prove thus: By Touch he cou'd not perceive any Motion, but what was up or down, to the right or left, nearer or farther from him; besides these, and their several Varieties or Complications, it is impossible he shou'd have any Idea of Motion. He wou'd not therefore think any thing to be Motion, or give the name Motion to any Idea, which he cou'd not range under some or other of those particular kinds thereof. But from SECT. XCV, it is plain that by the meer act of Vision, he cou'd not know Motion upwards or downwards, to the right or left, or in any other possible Direction. From which I conclude, he wou'd not know Motion at all at first sight. As for the Idea of Motion in Abstract, I shall not waste Paper about it, but
leave

leave it to my Reader, to make the best he can on't. To me it is perfectly Unintelligible.

CXXXVIII. The Consideration of Motion may furnish a new Field for Inquiry: But since the Manner wherein the Mind apprehends by Sight, the Motion of Tangible Objects, with the various Degrees thereof, may be easily collected, from what hath been said concerning the Manner, wherein that Sense doth suggest their various Distances, Magnitudes and Situations, I shall not enlarge any farther on this Subject, but proceed to inquire what may be alledged with greatest appearance of Reason, against the Proposition we have shewn to be true: For where there is so much Prejudice to be encountered, a bare and naked Demonstration of the Truth will scarce suffice. We must also satisfy the Scruples that Men may raise in favour of their preconceived Notions, shew whence the mistake arises, how it came to spread, and carefully disclose and root out those false Persuasions, that an early Prejudice might have implanted in the Mind.

CXXXIX. *First*, Therefore, it will be demanded, how visible Extension and Figures come to be called by the same Name, with tangible Extension and Figures, if they are not of the same kind with them? It must be something more than Humour or Accident, that cou'd occasion a Custom so constant and universal as this, which has obtained in all Ages and Nations of the World, and amongst all Ranks of Men, the Learned as well as the Illiterate.

CXL. To which I answer, we can no more argue a visible and tangible Square to be of the same Species, from their being called by the same Name,

than we can, that a tangible Square and the Monosyllable consisting of Six Letters, whereby it is marked, are of the same Species because they are both called by the same Name. It is customary to call written Words, and the Things they signify, by the same Name: For Words not being regarded in their own Nature, or otherwise than as they are Marks of Things, it had been superfluous, and beside the design of Language, to have given them Names distinct from those of the Things marked by them. The same Reason holds here also. Visible Figures are the Marks of tangible Figures, and from SECT. LIX. it is plain, that in themselves they are little regarded, or upon any other Score than for their Connexion with tangible Figures, which by Nature they are ordained to signify. And because this Language of Nature does not vary in different Ages or Nations, hence it is, that in all Times and Places, visible Figures are called by the same Names, as the respective tangible Figures suggested by them, and not because they are alike, or of the same sort with them.

CXLI. But, say you, surely a tangible Square is liker to a visible Square, than to a visible Circle: It has four Angles, and as many Sides; so also has the visible Square, but the visible Circle has no such thing, being bounded by one uniform Curve, without right Lines or Angles, which makes it unfit to represent the tangible Square, but very fit to represent the tangible Circle. Whence it clearly follows, that visible Figures are Patrons of, or of the same Species with the respective tangible Figures represented by them; that they are like unto them, and of their own Nature fitted to represent them, as being of the same sort; and that they are in no respect arbitrary Signs, as Words.

CXLII.

CXLII. I answer, it must be acknowledged, the visible Square is fitter than the visible Circle, to represent the tangible Square, but then it is not because it is liker, or more of a Species with it; but because the visible Square contains in it several distinct Parts, whereby to mark the several distinct, corresponding Parts of a tangible Square, whereas the visible Circle doth not. The Square perceived by Touch, hath four distinct, equal Sides, so also hath it four distinct equal Angles. It is therefore necessary, that the visible Figures which shall be most proper to mark it, contain four distinct equal Parts corresponding to the four Sides of the tangible Square; as likewise four other distinct and equal Parts, whereby to denote the four equal Angles of the tangible Square. And accordingly we see the visible Figures contain in them distinct visible Parts, answering to the distinct tangible Parts of the Figures signified, or suggested by them.

CXLIII. But it will not hence follow, that any visible Figure is like unto, or of the same Species with its corresponding tangible Figure, unless it be also shewen, that not only the Number, but also the Kind of the Parts be the same in both. To illustrate this, I observe that visible Figures represent tangible Figures, much after the same manner that written Words do Sounds. Now, in this respect, Words are not arbitrary, it not being indifferent, what written Word stands for any Sound: But it is requisite, that each Word contain in it so many distinct Characters, as there are Variations in the Sound it stands for. Thus the single Letter *a* is proper to mark one simple uniform Sound; and the word *Adultery* is accommodated to represent the Sound annexed to it, in

the Formation whereof, there being eight different Collisions, or Modifications of the Air by the Organs of Speech, each of which produces a difference of Sound, it was fit, the Word representing it shou'd consist of as many distinct Characters, thereby to mark each particular Difference or Part of the whole Sound: And yet no Body, I presume will say, the single Letter *a*, or the word *Adultery* are like unto, or of the same Species with the respective Sounds by them represented. It is indeed arbitrary that, in general, Letters of any Language represent Sounds at all; but when that is once agreed, it is not arbitrary what Combination of Letters shall represent this or that particular Sound. I leave this with the Reader to pursue, and apply it in his own Thoughts.

CXLIV. It must be confess'd that we are not so apt to confound other Signs with the Things signified, or to think them of the same Species, as we are visible and tangible Ideas. But a little Consideration will shew us how this may be, without our supposing them of a like Nature. These Signs are constant and universal, their Connexion with tangible Ideas has been learnt at our first Entrance into the World; and ever since, almost every Moment of our Lives, it has been occurring to our Thoughts, and fastening and striking deeper on our Minds. When we observe that Signs are variable, and of Humane Institution; when we remember, there was a time they were not connected in our Minds, with those things they now so readily suggest; but that their Signification was learned by the slow Steps of Experience: This preserves us from confounding them. But when we find the same Signs suggest the same Things all over the World; when we know they are not of Humane Institution

Institution, and cannot remember that we ever learned their Signification, but think that at first Sight they would have suggested to us the same Things they do now : All this persuades us they are of the same Species as the Things respectively represented by them, and that it is by a natural Resemblance they suggest them to our Minds,

CXLV. Add to this, that whenever we make a nice Survey of any Object, successively directing the Optic Axis to each Point thereof; there are certain Lines and Figures described by the Motion of the Head or Eye, which being in truth perceived by Feeling, do nevertheless so mix themselves as it were, with the Ideas of Sight, that we can scarce think but they appertain to that Sense. Again, the Ideas of Sight enter into the Mind, several at once more distinct and unmingled, than is usual in the other Senses beside the Touch. Sounds, for example, perceived at the same Instant, are apt to coalesce, if I may so say, into one Sound : But we can perceive at the same time great variety of visible Objects, very separate and distinct from each other. Now tangible Extension being made up of several Distinct coexistent parts, we may hence gather another Reason, that may dispose us to imagine a Likeness or Analogy between the immediate Objects of Sight and Touch. But nothing, certainly, doth more contribute to blend and confound them together, than the strict and close Connexion they have with each other. We cannot open our Eyes, but the Ideas of Distance, Bodies, and tangible Figures are suggested by them. So swift and sudden, and unperceiv'd is the Transition from visible to tangible Ideas, that we can scarce forbear thinking them equally the immediate Object of Vision.

CXLVI. The Prejudice, which is grounded on these, and whatever other Causes may be assigned thereof, sticks so fast, that it is impossible without obstinate Striving, and Labour of the Mind, to get intirely clear of it. But then the Reluctancy we find, in rejecting any Opinion, can be no Argument of its Truth, to whoever considers what has been already shewn, with regard to the Prejudices we entertain concerning the Distance, Magnitude, and Situation of Objects; Prejudices so familiar to our Minds, so confirmed and inveterate, as they will hardly give way to the clearest Demonstration.

CXLVII. Upon the whole, I think we may fairly conclude, that the proper Objects of Vision constitute an Universal Language of the Author of Nature, whereby we are instructed how to regulate our Actions, in order to attain those things, that are necessary to the Preservation and Well-being of our Bodies, as also to avoid whatever may be hurtful and destructive of them. It is by their Information that we are principally guided in all the Transactions and Concerns of Life. And the manner wherein they signify, and mark unto us the Objects which are at a Distance, is the same with that of Languages and Signs of Humane Appointment, which do not suggest the things signified, by any likeness or Identity of Nature, but only by an habitual Connexion, that Experience has made us to observe between them.

CXLVIII. Suppose one who had always continued Blind, be told by his Guide, that after he has advanced so many Steps, he shall come to the Brink of a Precipice, or be stopt by a Wall; must not
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this to him seem very admirable and surprizing? He cannot conceive how it is possible for Mortals to frame such Predictions as these, which to him would seem as strange and unaccountable, as Prophecy doth to others. Even they who are blessed with the visive Faculty, may (though familiarity make it less observed) find therein sufficient Cause of Admiration. The wonderful Art and Contrivance wherewith it is adjusted to those Ends and Purposes for which it was apparently designed, the vast Extent, Number, and Variety of Objects that are at once with so much ease, and quickness, and pleasure suggested by it: All these afford Subject for much and pleasing Speculation, and may, if any thing, give us some glimmering, analogous Prænotion of Things, which are placed beyond the certain Discovery and Comprehension of our present State.

CXLIX. I do not design to trouble my self with drawing Corollaries, from the Doctrine I have hitherto laid down. If it bears the Test, others may, so far as they shall think convenient, employ their Thoughts in extending it farther, and applying it to whatever Purposes it may be subservient to: Only, I cannot forbear making some Inquiry concerning the Object of Geometry, which the Subject we have been upon doth naturally lead one to. We have shewn there is no such Idea as that of Extension in Abstract, and that there are two kinds of sensible Extension and Figures, which are intirely distinct and heterogeneous from each other. Now, it is natural to inquire which of these is the Object of Geometry.

CL. Some things there are, which at first sight incline one to think Geometry conversant about

Visible Extension. The constant use of the Eyes, both in the practical and speculative Parts of that Science doth very much induce us thereto. It would, without doubt, seem odd to a Mathematician to go about to convince him, the Diagrams he saw upon Paper were not the Figures, or even the Likeness of the Figures, which make the Subject of the Demonstration. The contrary being held an unquestionable Truth, not only by Mathematicians, but also by those who apply themselves more particularly to the Study of Logick; I mean, who consider the Nature of Science, Certainty and Demonstration: It being by them assigned as one Reason, of the extraordinary Clearness and Evidence of Geometry, that in this Science the Reasonings are free from those Inconveniencies, which attend the use of arbitrary Signs, the very Ideas themselves being copied out, and exposed to view upon Paper, But, by the bye, how well this agrees with what they likewise assert of abstract Ideas, being the Object of Geometrical Demonstration, I leave to be considered,

CLI. To come to a Resolution in this Point, we need only observe what hath been said in SECT. LIX. LX. LXI. where it is shewn that visible Extensions in themselves are little regarded, and have no settled determinate Greatness, and that Men measure altogether, by the Application of Tangible Extension to Tangible Extension. All which makes it evident, that Visible Extension and Figures are not the Object of Geometry,

CLII. It is therefore plain that Visible Figures are of the same Use in Geometry, that Words are: And the one may as well be accounted the Object of that Science, as the other; neither of them being

ing any otherwise concerned therein, than as they represent or suggest to the Mind the particular Tangible Figures connected with them. There is indeed this Difference between the Signification of Tangible Figures by Visible Figures, and of Ideas by Words: That whereas the Latter is variable and uncertain, depending altogether on the Arbitrary Appointment of Men, the former is fixed, and immutably the same in all Times and Places. A Visible Square, for Instance, suggests to the Mind the same Tangible Figure in *Europe*, that it doth in *America*. Hence it is that the Voice of the Author of Nature, which speaks to our Eyes, is not liable to that Misinterpretation and Ambiguity, that Languages of Humane Contrivance are unavoidably subject to.

CLIII. Though what has been said may suffice to shew what ought to be determined, with relation to the Object of Geometry; I shall nevertheless, for the fuller illustration thereof, consider the Case of an Intelligence, or unbodied Spirit, which is supposed to see perfectly well, *i. e.* to have a clear Perception of the proper and immediate Objects of Sight, but to have no Sense of Touch. Whether there be any such Being in Nature or no, is beside my purpose to inquire. It sufficeth, that the Supposition contains no Contradiction in it. Let us now examine, what Proficiency such a one may be able to make in Geometry. Which Speculation will lead us more clearly to see, whether the Ideas of Sight can possibly be the Object of that Science,

CLIV. *First*, then it is certain, the aforesaid Intelligence could have no Idea of a Solid, or Quantity of three Dimensions, which followeth from

from its not having any Idea of Distance. We indeed are prone to think, that we have by Sight the Ideas of Space and Solids, which ariseth from our imagining that we do, strictly speaking, see Distance, and some parts of an Object at a greater distance than others, which hath been demonstrated to be the Effect of the Experience we have had, what Ideas of Touch are connected with such and such Ideas attending Vision: But the Intelligence here spoken of is supposed to have no Experience of Touch. He wou'd not, therefore judge as we do, nor have any Idea of Distance, Outness, or Profundity, nor consequently of Space or Body, either immediately or by Suggestion. Whence it is plain, he can have no Notion of those Parts of Geometry, which relate to the Mensuration of Solids, and their Convex or Concave Surfaces, and contemplate the Properties of Lines generated by the Section of a Solid. The conceiving of any part whereof, is beyond the reach of his Faculties.

CLV. Farther, he cannot comprehend the Manner wherein Geometers describe a right Line or Circle; the Rule and Compass with their use, being things of which it is impossible he should have any Notion: Nor is it an easier matter for him to conceive the placing of one Plain or Angle on another, in order to prove their Equality: Since that supposeth some Idea of Distance, or External Space. All which makes it evident, our pure Intelligence could never attain to know so much as the first Elements of plain Geometry, And perhaps, upon a nice Inquiry, it will be found, he cannot even have an Idea of plain Figures any more than he can of Solids; since some Idea of Distance is necessary, to form the Idea of
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a Geometrical Plain, as will appear to whoever shall reflect a little on it.

CLVI. All that is properly perceived by the visive Faculty, amounts to no more than Colours with their Variations, and different Proportions of Light and Shade: But, the perpetual Mutability, and Fleetingness of those immediate Objects of Sight, render them incapable of being managed after the manner of Geometrical Figures; nor is it in any Degree useful that they should. It is true, there are divers of them perceived at once; and more of some, and less of others: But accurately to compute their Magnitude, and assign precise determinate Proportions, between Things so variable and inconstant, if we suppose it possible to be done, must yet be a very trifling and insignificant Labour.

CLVII. I must confess, it seems to be ~~the~~ Opinion of some ingenious Men, that flat or plain Figures are immediate Objects of Sight, though they acknowledge Solids are not. And this Opinion of theirs is grounded on what is observed in Painting, wherein (say they) the Ideas immediately imprinted on the Mind, are only of Plains variously coloured, which by a sudden Act of the Judgment are changed into Solids: But, with a little Attention we shall find the Plains here mentioned, as the immediate Objects of Sight, are not Visible but Tangible Plains. For when we say that Pictures are Plains: we mean thereby, that they appear to the Touch smooth and uniform. But then this Smoothness and Uniformity, or, in other Words, this Plainness of the Picture, is not perceived immediately by Vision: For it appear-eth to the Eye various and multiform.

CLVIII.

CLVIII. From all which we may conclude, that Plains are no more the immediate Object of Sight than Solids. What we strictly see are not Solids, nor yet Plains variously coloured; they are only diversity of Colours. And some of these suggest to the Mind Solids, and others plain Figures; just as they have been experienced to be connected with the one, or the other: So that we see Plains, in the same way that we see Solids; both being equally suggested by the immediate Objects of Sight, which accordingly are themselves denominated Plains and Solids; But though they are called by the same Names, with the Things marked by them, they are nevertheless of a Nature intirely different, as hath been demonstrated.

CLIX. What hath been said is, if I mistake not, sufficient to decide the Question we propose to examine, concerning the Ability of a pure Spirit, such as we have described, to know *Geometry*: It is, indeed, no easy matter for us to enter precisely into the Thoughts of such an Intelligence; because we cannot, without great Pains, cleverly separate and disintangle in our Thoughts the proper Objects of Sight from those of Touch which are connected with them. This, indeed, in a compleat Degree, seems scarce possible to be performed: Which will not seem strange to us, if we consider how hard it is, for any one to hear the Words of his Native Language pronounced in his Ears without understanding them. Though he endeavour to disunite the meaning from the Sound, it will nevertheless intrude into his Thoughts, and he shall find it extreme difficult, if not impossible, to put himself exactly in the Posture of a Foreigner, that never learned the Language, so
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as to be affected barely with the Sounds themselves, and not perceive the Signification annexed to them By this time, I suppose, it is clear that neither Abstract, nor Visible Extension makes the Object of Geometry; the not discerning of which may perhaps, have created some Difficulty and useless Labour in Mathematics.

F I N I S.

as to be affected hardly with the sound themselves, will not perceive the distinction annexed to them. By this time, I suppose, it is clear and manifest, that the little distinction makes the Object of Vision; the not distinguishing of which may perhaps, have evened the balance and misled the eye in its judgment.



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